State of Idaho
DEPARTMENT OF WATER RESOURCES
Northern Region, 7600 N. Mineral Drive, Suite 100 • Coeur d'Alene, Idaho 83815
Phone: (208) 762-2800 • Fax: (208) 762-2819 • Web Site: www.idwr.idaho.gov

C. L. "BUTCH" OTTER
Governor

DAVID R. TUTHILL, JR.
Director

April 7, 2008

Attn Andy Rasmussen
Western Federal Lands-Highway Division
610 E 5th St
Vancouver WA 98661-3893

RE: Joint Application for Permit No. 95-20026.

Dear Mr. Rasmussen:

This office has reviewed your above referenced application for a permit to alter the channel of Fernan Creek and has prepared a decision as provided for in Section 42-3805, Idaho Code. The conditions set forth in this permit are intended to prevent degradation of water quality, protect fish and wildlife habitat and protect the long term stability of the stream channel. Your cooperation in meeting these conditions is appreciated. If you cannot meet the conditions set forth in the permit, please contact this office for further consideration.

Your project may require a separate permit from the U.S. Army Corps of Engineers. You should contact them to obtain any required permit before you start work.

PERMIT

You may consider this letter as a permit to perform a multitude of installations, construction and excavations below the ordinary high water mark of Fernan Creek. The project is located along 10.7 miles of Fernan Lake and Fernan Creek. Your project is subject to the following Conditions and Minimum Standards:

SPECIAL CONDITIONS:

[1] All construction shall be completed in accordance with the descriptions & methods on the application and attachments, unless otherwise specified. Any changes must be approved by this department prior to construction.

[2] Equipment shall be operated from the banks.

[3] The conditions set forth in the 401 Certification from the IDEQ dated March 25, 2008 (copy attached), are also made part of the conditions for this approved permit.

[4] All fuel, oil and other hazardous materials shall be stored and equipment refueled away from the stream channel to insure that a spill will not enter the waterway.

[5] Hazardous, toxic and/or deleterious materials must not be stored, disposed of or accumulated adjacent to a waterway, unless adequate measures and controls are provided to insure these materials will not enter the waterway as a result of high water, precipitation runoff, wind, storage facility failure, accidents in operation or unauthorized third party activities.

[6] This permit shall expire December 31, 2009.

The Coeur d' Alene office of the Department of Water Resources shall be contacted at least three (3) working days prior to beginning construction.

MINIMUM STANDARDS:

(These standards are established in the Administrative Rules of the Idaho Water Resources Board, Stream Channel Alteration Rules, IDAPA 37 Tile 03 Chapter 07 dated July 1, 1993, and are enclosed with this permit.)

Rule 56 - Construction Procedures
Rule 62 - Culverts and Bridges

GENERAL CONDITIONS:

This permit does not constitute any of the following:

a. An easement or right-of-way to trespass or work upon property belonging to others.
b. Other approval that may be required by State or Federal Government, unless specifically stated in the special conditions above.
c. Responsibility of the Department of Water Resources for damage to adjacent properties due to work done.
d. Compliance with the Federal Flood Insurance Program, FEMA regulations or approval of the local Planning and Zoning authority.

1. In accordance with Idaho Code, Section 55-2201 - 55-2210, the applicant and/or his contractors must contact Digline statewide phone number 1-800-342-1585, Boise area 342-1585, not less than 3 working days prior to the start of any excavation for this project.
2. The permit holder or operator must have a copy of this permit at the alteration site, available for inspection at all times.
3. The Department of Water Resources may cancel this permit at any time that it determines such action is necessary to minimize adverse impact on the stream channel.

4. Conditions and construction procedures approved under this permit may not coincide with the proposal as submitted. Failure to adhere to conditions as set forth herein can result in legal action as provided for in Section 42-3809, Idaho Code.
5. A separate permit is required from the Department of Lands for the work below the mean high water mark of Fernan Lake.

If you object to the decision issuing this permit with the above conditions, you have fifteen days in which to notify this office in writing that you request a formal hearing on the matter. If an objection has not been received within fifteen days, the decision will be final.

Please contact Greg Taylor of my staff at 762-2800 if you have any questions regarding this matter.

Sincerely,

Robert G. Haynes, P.E.
Regional Manager

cc: Mary Terra-Berns, IDFG
June Bergquist, IDEQ
Mike Doherty, ACOE
Jim Brady, IDL
File

056. CONSTRUCTION PROCEDURES (Rule 56).

01. Conformance to Procedures. Construction shall be done in accordance with the following procedures unless specific approval of other procedures has been given by the Director. When an applicant desires to proceed in a manner different from the following, such procedures should be described on the application.

02. Operation of Construction Equipment. No construction equipment shall be operated below the existing water surface without specific approval from the Director except as follows: Fording the stream at one location only will be permitted unless otherwise specified; however, vehicles and equipment will not be permitted to push or pull material along the streambed below the existing water level. Work below the water which is essential for preparation of culvert bedding or approved footing installations shall be permitted to the extent that it does not create unnecessary turbidity or stream channel disturbance. Frequent fording will not be permitted in areas where extensive turbidity will be created.

03. Temporary Structures. Any temporary crossings, bridge supports, cofferdams, or other structures that will be needed during the period of construction shall be designed to handle high flows that could be anticipated during the construction period. All structures shall be completely removed from the stream channel at the conclusion of construction and the area shall be restored to a natural appearance.

04. Minimizing Disturbance of Area. Care shall be taken to cause only the minimum necessary disturbance to the natural appearance of the area. Streambank vegetation shall be protected except where its removal is absolutely necessary for completion of the work adjacent to the stream channel.

05. Disposal of Removed Materials. Any vegetation, debris, or other material removed during construction shall be disposed of at some location out of the stream channel where it cannot reenter the channel during high stream flows.

06. New Cut of Fill Slopes. All new cut or fill slopes that will not be protected with some form of riprap shall be seeded with grass and planted with native vegetation to prevent erosion.

07. Fill Material. All fill material shall be placed and compacted in horizontal lifts except as provided for in Rule 55.05.e. for uncompacted dike and levee construction. Areas to be filled shall be cleared of all vegetation, debris and other materials that would be objectionable in the fill.

08. Limitations on Construction Period. The Director may limit the period of construction as needed to minimize conflicts with fish migration and spawning, recreation use, and other uses.

062. CULVERTS AND BRIDGES (Rule 62).

01. Culverts and Bridges. Culverts and bridges shall be capable of carrying streamflows and shall not significantly alter conditions upstream or downstream by causing flooding, turbidity, or other problems. The appearance of such installations shall not detract from the natural surroundings of the area.

02. Location of Culverts and Bridges. Culverts and bridges should be located so that a direct line of approach exists at both the entrance and exit. Abrupt bends at the entrance or exit shall not exist unless suitable erosion protection is provided.

03. Ideal Gradient. The ideal gradient (bottom slope) is one which is steep enough to prevent silting but flat enough to prevent scouring due to high velocity flows. It is often advisable to make the gradient of a culvert coincide with the average streambed gradient.

a. Where a culvert is installed on a slope steeper than 20%, provisions to anchor the culvert in position will be required. Such provisions shall be included in the application and may involve the use of collars, headwall structures, etc. Smooth concrete pipe having no protruding bell joints or other irregularities shall have such anchoring provisions if the gradient exceeds 10 percent.

04. Size of Culvert or Bridge Opening. The size of the culvert or bridge opening shall be such that it is capable of passing design flows without overtopping the streambank or causing flooding or other damage.

a. Design flows shall be based upon the following minimum criteria:

Drainage Area	Design Flow Frequency
Less than 50 sq. mi.	25 years*
Over 50 sq. mi. or more	50 years or greatest flow of record, whichever is more

b. For culverts and bridges located on U.S. Forest Service or other federal lands, the sizing should comply with the Forest Practices Act as adopted by the federal agencies or the Department of Lands.

c. For culverts or bridges located in a community qualifying for the national flood issuance program, the minimum size culvert shall accommodate the 100 year design flow frequency.

d. If the culvert or bridge design is impractical for the site, the crossing may be designed with additional flow capacity outside the actual crossing structure, provided there is no increase in the Base Flood Elevation.

(NOTE: When flow data on a particular stream is unavailable, it is almost always safe to maintain the existing gradient and cross-section area present in the existing stream channel. Comparing the proposed crossing size with others upstream or downstream is also a valuable means of obtaining information regarding the size needed for a proposed crossing.)

e. Minimum clearance shall be at least one (1) foot at all bridges. This may need to be increased substantially in the areas where ice passage or debris may be a problem. Minimum culvert sizes required for stream crossings: (1) 18" diameter for culverts up to 70 feet long. (2) 24" diameter for all culverts over 70 feet long.

f. In streams where fish passage is of concern as determined by the director, an applicant shall comply with the following provisions and/or other approved criteria to ensure that passage will not be prevented by a proposed crossing.

g. Minimum water depth shall be approximately eight (8) inches for salmon and steelhead and at least three (3) inches in all other cases.

h. Maximum flow velocities for streams shall not exceed those shown in Figure 17 in Appendix XVIII (or see "Forms, Appendicies, Charts, Graphs, Etc..." Idaho Administrative Bulletin, July 1, 1993, Volume 93-1, Page 37-202), for more than a 48-hour period. The curve used will depend on the type of fish to be passed.

i. Where it is not feasible to adjust the size or slope to obtain permissible velocities, the following precautions may be utilized to achieve the desired situation.

j. Baffles downstream or inside the culvert may be utilized to increase depth and reduce velocity. Design criteria may be obtained from the Idaho Fish and Game Department.

k. Where multiple openings for flow are provided, baffles or other measures used in one opening only shall be adequate provided that the opening is designed to carry the main flow during low-flow periods.

05. Construction of Crossings. When crossings are constructed in erodible material, upstream and downstream ends shall be protected from erosive damage through the use of such methods as dumped rock riprap, headwall structures, etc., and such protection shall extend below the erodible streambed and into the banks at least two (2) feet unless some other provisions are made

to prevent undermining.

a. Where fish passage must be provided, upstream drops at the entrance to a culvert will not be permitted and a maximum drop of 1 foot will be permitted at the downstream end if an adequate jumping pool is maintained below the drop.

b. Downstream control structures such as are shown in Figure 18 in Appendix XIX, (or see "Forms, Appendicies, Charts, Graphs, Etc..." Idaho Administrative Bulletin, July 1, 1993, Volume 93-1, Page 37-203), can be used to reduce downstream erosion and improve fish passage. They may be constructed with gabions, pilings and rock drop structures.

06. Multiple Openings. Where a multiple opening will consist of two or more separate culvert structures, they shall be spaced far enough apart to allow proper compaction of the fill between the individual structures. The minimum spacing in all situations shall be 1 foot. In areas where fish passage must be provided, only one opening shall be constructed to carry all low flows. Low flow baffles may be required to facilitate fish passage.

07. Areas to be Filled. All areas to be filled shall be cleared of vegetation, topsoil, and other unsuitable material prior to placing fill. Material cleared from the site shall be disposed of above the high water line of the stream. Fill material shall be reasonably well-graded and compacted and shall not contain large quantities of silt, sand, organic matter, or debris. In locations where silty or sandy material must be utilized for fill material, it will be necessary to construct impervious sections both upstream and downstream to prevent the erodible sand or silt from being carried away (see Figure 19 in Appendix XX or see "Forms, Appendicies, Charts, Graphs, Etc..." Idaho Administrative Bulletin, July 1, 1993, Volume 93-1, Page 37-204). Sideslopes for fills shall not exceed 1.5:1. Minimum cover over all culvert pipes and arches shall be 1 foot.

08. Installation of Pipe and Arch Culvert. All pipe and arch culverts shall be installed in accordance with manufacturer's recommendations.

a. The culvert shall be designed so that headwaters will not rise above the top of the culvert entrance unless a headworks is provided.

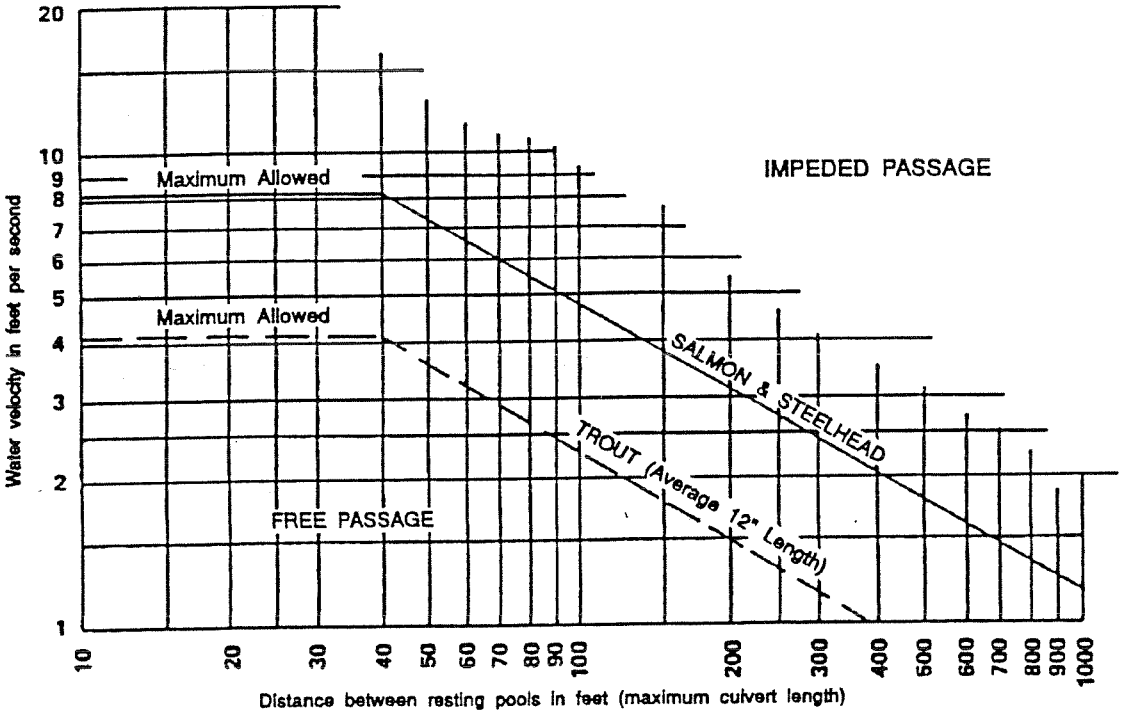
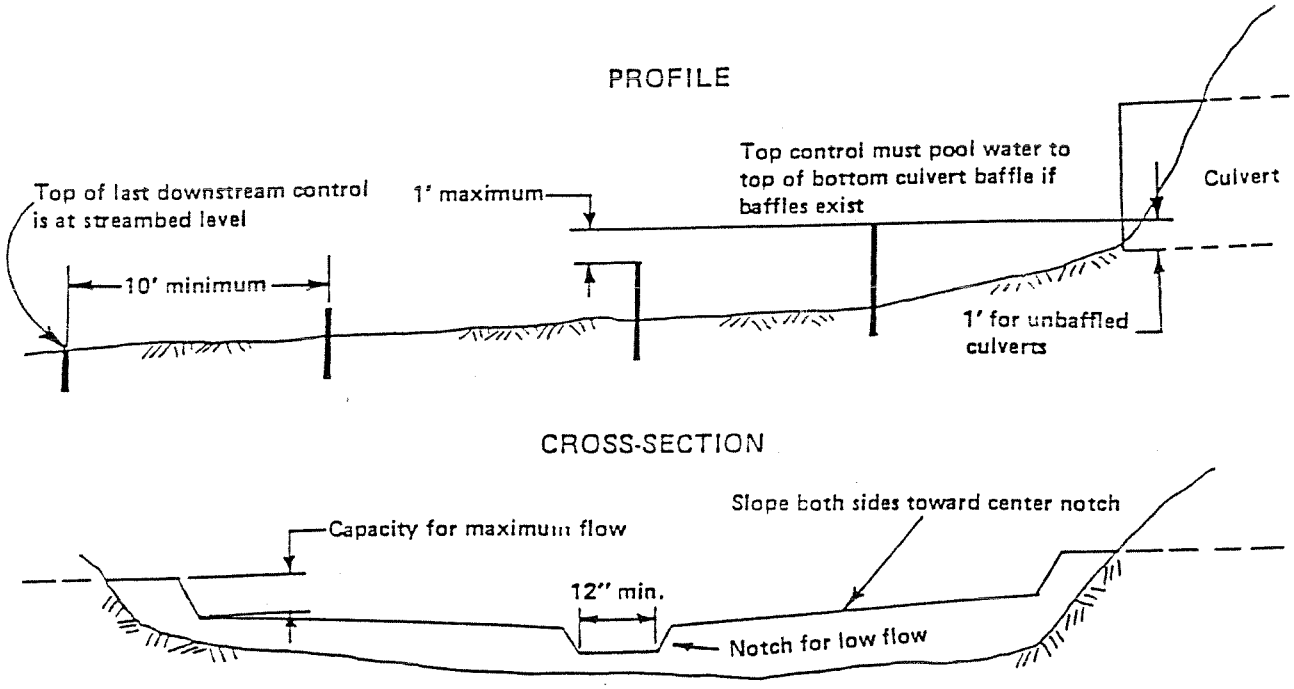


FIGURE 17. Swimming capability of migrating salmon and trout (Alaskan Curve)

FIGURE 18. Downstream control structures used to reduce downstream erosion and improve fish passage



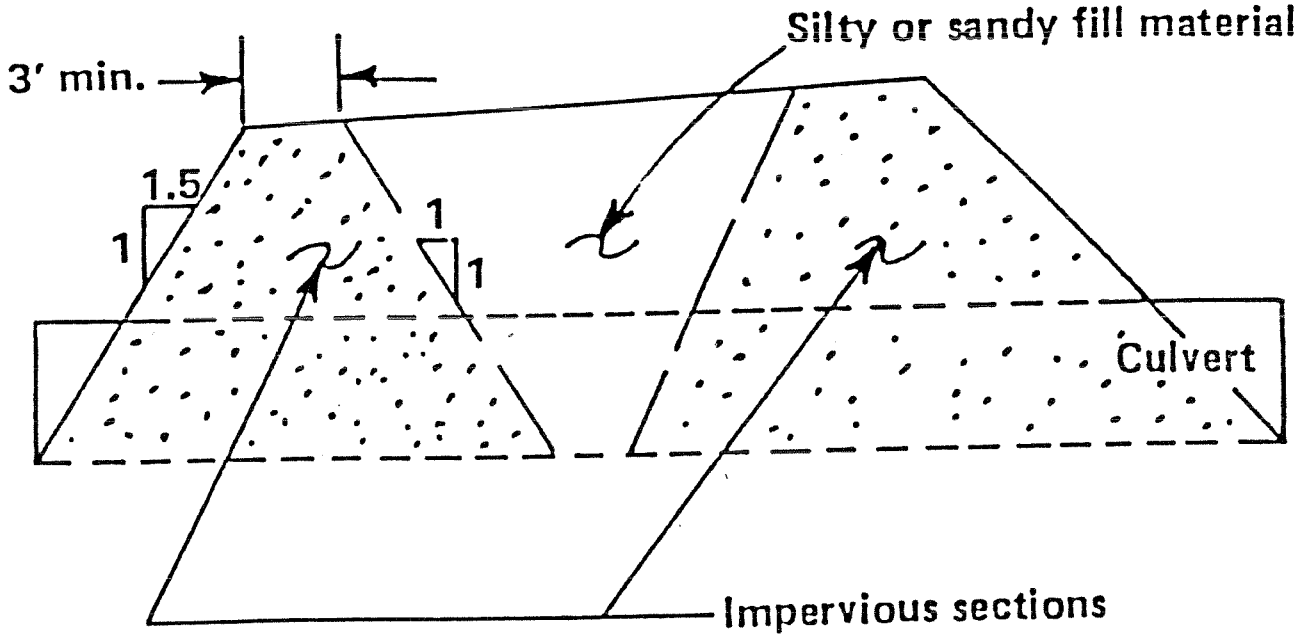


FIGURE 19. Culvert backfill using silty or sandy material

STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

2110 Ironwood Parkway • Coeur d'Alene, Idaho 83814 • (208) 769-1422

C.L. "Butch" Otter, Governor
Toni Hardesty, Director

March 25, 2008

Andy Rasmussen
Federal Highway Administration
Western Federal Lands Highway Division
610 E. 5th St
Vancouver, WA 98661-3893

RE: 401 Certification of Fernan Lake Road Construction Project

Dear Mr. Rasmussen,

We have reviewed this application to discharge 8,000 cubic yards of fill material and riprap into 1.09 acres of Fernan Lake and 12,000 cubic yards of fill and rock into 2.59 acres of Fernan Creek and its adjacent wetlands and unnamed tributaries. The purpose of the fill is to widen and straighten 10.7 miles of Fernan Lake Road. The project will include a bridge construction across approximately 400 feet of Fernan Lake and the removal of an existing causeway. This project was presented to the public in a December 20, 2007 Army Corps public notice. During this comment period, DEQ did not receive any requests for a preliminary certification.

Under Section 401 of the Federal Clean Water Act, federal agencies issuing discharge permits must be provided a notice of certification from the State of Idaho that the project will meet state water quality standards. By copy of this letter, the Army Corps of Engineers is being notified of our certification decision and conditions.

The following conditions shall be applied to the Army Corps of Engineers Permit for the project:

1. If there is a spill or release of a hazardous material, the State Communications Center shall be contacted immediately at 1-800-632-8000. All contractors shall have ready access to the State Communications Center number.

2. Each field supervisor of every contractor involved in water related work shall read this certification.

3. Hazardous and deleterious materials shall not be stored, disposed of, or accumulated adjacent to or in the immediate vicinity of state waters unless adequate measures and controls are provided to insure that those material will not enter state waters as result of high water, precipitation runoff, wind, storage facility failure, accidents in operation, or unauthorized third party activities.

4. Equipment shall be kept in good repair so as to not chronically leak fluids. If equipment in good repair normally leak fluids, absorbent pads or other containment shall be placed to capture the fluid during non-operating hours.

5. No equipment, boats, barges or associated machinery shall create a petroleum product sheen on the water due to poor maintenance, leaks, bilge water pumping, runoff from petroleum soaked decks, poor fuel handling practices or lack of other best management practices associated with petroleum products handling, use and storage.

6. Work in Fernan Creek and adjacent wetlands shall be done during low flow. This does not include areas isolated from surface water using cofferdams.

7. This certification does not authorize return flows from a mechanical water treatment system unless authorized by a NPDES discharge permit.

8. This certification does not authorize discharges to waters of the state for purposes of trench, foundation or cofferdam de-watering (with the exceptions below). These waters are typically highly turbid and can include added pollutants such as cement, oils, grease and drilling mud.

    a. The initial dewatering within a newly formed cofferdam is acceptable if there are no compounds added to the water and it meets water quality standards. Provisions shall be made to protect the bed and banks from scour when dewatering.

    b. Dewatering of inflatable cofferdams into waters of the state is acceptable. Provisions shall be made to protect the bed and banks from scour when dewatering. Water quality standards shall be met during dewatering.

9. Water-filled cofferdams shall be reliable and function correctly. Their design and materials must have been previously and scientifically field tested to determine effectiveness in water quality protection. Manufacturers specifications and deployment instructions shall be followed. If there is flowing water, dams must have been designed, tested and recommended by the manufacturer for this condition.

Preference shall be given to dams with double reinforced seams. Water-filled cofferdams shall function in such a manner as to meet Idaho Water Quality Standards.

10. Turbidity shall be measured using a calibrated portable turbidimeter, if a visible plume of sediment outside of a containment area can be seen in Fernan Lake or Fernan Creek resulting from this project. Employee shall be trained to use the turbidimeter.

11. Turbidity in the plume shall not exceed background turbidity by more than 50 NTU instantaneously or more than 25 NTU for more than 10 consecutive days and shall be measured immediately adjacent to the work during work activity. Background turbidity shall be sampled immediately upstream of the project but above any disturbance created by the project. One background measurement shall be taken for each sampling event.

12. Monitoring data shall be legibly recorded in an organized fashion such that location of sample, turbidity data presented in nephelometric units, time of collection and cause of turbidity is clearly indicated.

13. If turbidity standards are exceeded, immediate steps shall be taken to reduce turbidity to below the standard. These steps shall use knowledgeable and reasonable effort, using a higher level of knowledgeable and reasonable effort at each instance water quality standards are exceeded. This iterative process ensures that best management practices that are not working are replaced or enhanced by more effective measures. These steps shall be legibly recorded in an organized fashion.

14. No soil binder, fertilizer or mulch shall be placed below the ordinary high water mark of Fernan Lake or Fernan Creek.

15. Silt fences shall be placed well above the ordinary high water mark and outside of wetland boundaries unless fill is being added to the water body. The purpose of silt fence is to keep sediment from entering the water body or wetland, not to temporarily trap it in one area of the water body or wetland only to be suspended when the water level rises. Additionally, the trenching in of silt fences on the lake or stream bed also creates disturbance that we want to minimize as much as possible.

16. Disturbed sediment below the ordinary high water mark shall be smoothed immediately after the completion of that project activity or prior to anticipated inundation due to weather or seasonal change. The purpose of this is to prevent suspension of loose sediment after the dredged area is inundated with water.

17. Silt curtains shall be reliable and function correctly. Curtain design and materials must have been previously and scientifically field tested to determine effectiveness in water quality protection. Manufacturers specifications and deployment instructions shall be followed. If there is flowing water, curtains must have been designed, tested and recommended by the manufacturer for this condition. Curtains that drag back and forth along the bottom of the lake, stream or river due to wave action are incorrectly installed and shall be considered a violation of this certification. The silt curtain shall function in such a manner as to meet Idaho Water Quality Standards for turbidity (see paragraph 11.).

18. Silt curtains shall be deployed so as to minimize the area within the curtain while still maintaining optimum function.

19. Monitoring of turbidity using a portable turbidimeter shall occur when turbid water is observed outside of a silt curtain. Monitoring of silt curtains shall follow the above described process for turbidity.

20. Placement of portable toilets shall not be in the vicinity of any water body. The distance shall be such that if tipped over, the discharge should not be able to reach a water body or wetland. A barrier of straw bales could also be constructed to provide secondary containment if this distance can't be achieved due to site restrictions.

21. The contractors shall be notified of and be prepared for seasonal changing water levels of Fernan Creek and Fernan Lake. Winter and spring months commonly see water levels fluctuate as a result of rain on snow events or rapid snow melt. Best management practices shall be designed to function effectively with this changing water level and rain on snow conditions.

22. If dredging of the causeway results in a release of petroleum contamination or other hazardous or deleterious material to waters of the state, the dredging shall immediately halt, booms deployed, State Communications Center notified and a plan of action submitted to DEQ for approval prior to resuming work.

23. Large woody debris in Fernan Lake that must be moved for construction work shall be slowly moved lake-ward a minimum distance to complete construction work. The purpose of this practice is to minimize turbidity and protect the integrity of the debris. Large woody debris shall be securely roped to shore if drifting is a concern or marked with buoys to allow for easy retrieval when placing it in the new construction. Roadside "save" trees shall not be used to rope or cable large woody debris to shore. Large woody debris is defined for the purpose of this certification to be woody

material that is 8 inches in diameter and eight feet or longer, prior to movement. Damaged woody debris shall be replaced with wood of similar shape and size.

If construction is completed in accordance with the described work plan and above conditions, DEQ certifies under Section 401 that this construction will comply with applicable requirements of Sections 301, 302, 303, 306, and 307 of the Clean Water Act, as amended, and will not violate Idaho Water Quality Standards.

Any modification or amendment to the project, which DEQ expects will result in additional impacts to water quality, shall require a new 401 water quality certification from DEQ before any construction activities affected by the modification or amendment may proceed.

All construction activities authorized under the referenced permit shall cease for failure of the applicant to comply with the conditions of this certification and shall not resume until the applicant demonstrates to the satisfaction of DEQ compliance with all the conditions of this certification.

This §401 Water Quality Certification may be appealed pursuant to the Environmental Protection and Health Act, Idaho Code 39-107(5), the Idaho Administrative Procedure Act and the rules of Administrative Procedure before the Board of Environmental Quality, IDAPA 58.01.23. Such an appeal is a prerequisite to any district court action and must be initiated by filing a petition for a contested case in accordance with the Rules of Administrative Procedure before the Board of Environmental Quality (IDAPA 58.01.23) within thirty-five days of the date of this 401 certification.

This certification does not constitute authorization of the permitted activities by any other local, state or federal agency or private person or entity. This certification does not excuse the permit holder from any obligation that may exist to obtain any other necessary approvals, authorizations or permits, including without limitation, any approval, if one is required, from the owner of a water conveyance system to use the system in connection with the permitted activities.

DEQ would like to strongly urge Federal Highways to take extra precautions in the protection of riparian trees along Fernan Lake. Due to the harsh growing conditions we do not anticipate a high survival of planted trees and those that do make it may grow very slowly. The functions and values the existing trees provide to the aquatic biota of Fernan Lake combined with the difficulty in growing them, make the existing trees extremely valuable. We suggest each "save" tree be generously marked with "caution" printed

brightly colored tape. Save trees should not be used for construction or signage in any manner and fill should not be placed around the base of tree trunks. Additional landscaping features might be needed to deal with fill in some locations.

If you have any questions regarding this certification please contact June Bergquist at 208-666-4605.

Sincerely,

Daniel Redline, Acting Regional Administrator
Coeur d'Alene Regional Office

cc:

Mike Doherty - Army Corps of Engineers
Jim Brady - Idaho Department of Lands, Sandpoint
Mary Terra-Berns - Idaho Fish and Game
John Olson - U.S. Environmental Protection Agency, Boise

DEPARTMENT OF THE ARMY PERMIT

Permittee: Federal Highway Administration, Western Federal Lands, Highway Division

Permit Number: NWW-2007-1060-C01

Issuing Office: Walla Walla District

NOTE: The term "you" and its derivatives, as used in this permit, means the permittee or any future transferee. The term "this office" refers to the appropriate district or division office of the Corps of Engineers having jurisdiction over the permitted activity or the appropriate official acting under the authority of the commanding officer.

You are authorized to perform work in accordance with the terms and conditions specified below.

Project Description:

Discharge approximately 8,000 cubic yards of clean structural fill and riprap into 1.09 acres waterward of the ordinary high water mark of Fernan Lake. Discharge approximately 12,000 cubic yards of clean fill and rock into 2.59 acres of Fernan Creek and its adjacent wetlands and unnamed tributaries. Discharges associated with mitigation activities identified on permit drawings are also approved by this permit.

THE PROJECT SHALL BE CONSTRUCTED ACCORDING TO THE ENCLOSED PLANS AND DRAWINGS (SHEETS 1 THROUGH 33), dated May 15, 2008.

Project Location:

Fernan Lake, Fernan Creek, its adjacent wetlands, and unnamed tributaries in Sections 15, 16, and 17, Township 50 N., Range 3 W., and Sections 25, 35, and 36, Township 51 N., Range 3W., and Sections 29 and 30, Township 51 N., Range 2 W., Boise Meridian, in Kootenai County, east of Coeur d'Alene, Idaho.

Permit Conditions:

General Conditions:

1. The time limit for completing the work authorized ends on **May 31, 2011**. If you find that you need more time to complete the authorized activity, submit your request for a time extension to this office for consideration at least 1 month before the above date is reached.

2. You must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. You are not relieved of this

requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 4 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification from this permit from this office, which may require restoration of the area.

3. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and state coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

4. If you sell the property associated with this permit, you must obtain the signature of the new owner in the space provided and forward a copy of the permit to this office to validate the transfer of this authorization.

5. If a conditioned water quality certification has been issued for your project, you must comply with the conditions specified in the certification as special conditions to this permit. For your convenience, a copy of the certification is attached if it contains such conditions.

6. You must allow representatives from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished with the terms and conditions of your permit.

Special Conditions:

1. Permittee may only conduct ground disturbing activities during low flow conditions between April 15 and October 15, to avoid erosion and sedimentation during wet periods of the year. Prior to conducting ground-disturbing activities and discharging fill material into Fernan Lake between April 15 and June 30, permittee shall consult with Idaho Department of Fish and Game (IDFG) to determine if the work will affect shoreline fish spawning habitat and if it is safe to proceed with construction in the specific location during that period. If notified by IDFG that it is not safe to proceed with construction, permittee shall wait to conduct work in Fernan Lake after June 30.

2. Permittee shall install erosion and sediment controls by October 15 of each year, and periodically monitor them to ensure disturbed soils are secured for the winter. Erosion and sediment controls shall be installed and maintained following manufacturer specifications to avoid sediment being washed into waters of the United States.

3. Permittee shall comply with the September 27, 2007 Storm Water Pollution Prevention Plan NOI submitted to EPA to reduce excessive erosion and sedimentation from the project. As stated in the NOI on page 4, all disturbed soils must be protected from erosion with appropriate product treatment(s). Additionally, applicable treatments must be applied within 7 days of achieving final grade to control and reduce the chance of slope failures due to precipitation events. Follow-

on permanent planting shall be completed when the weather is appropriate or supplemental irrigation shall be provided to assure establishment and survival of vegetation.

4. Permittee shall contact the Coeur d'Alene Tribal Historic Preservation Officer (THPO) prior to conducting any ground disturbing activities. If the THPO determines it is necessary, a cultural resources expert shall be available to monitor ground disturbing activities.

5. Mitigation shall be accomplished as specified in the mitigation plan entitled "Wetland Mitigation Report Fernan Lake Road ID PFH 80-1(1)", dated March 2008, prepared by FHWA, and according to the permit drawings. Mitigation shall be accomplished concurrent with or prior to the discharge of fill material authorized by this permit.

6. Permittee shall protect the mitigation sites in perpetuity. Prior to beginning the discharges authorized by this permit, the mitigation site shall be designated as a conservation easement that is managed by an environmental group with proven experience in such management. A copy of the draft conservation easement agreement shall be submitted to the Corps for approval. Prior to beginning the discharges authorized by this permit, permittee shall submit a copy of the signed, approved conservation easement to the Corps. The document shall protect wetland functions of the mitigation site and prohibit domestic livestock grazing, burning, wholesale spraying of herbicides, mowing, and tree and shrub cutting other than selective pruning. If necessary, the agreement shall require fencing be maintained to prevent livestock from entering the mitigation site.

7. Permittee shall submit an annual wetland mitigation report to the Corps of Engineers, Coeur d'Alene Regulatory Office each year following initial construction of the mitigation area, for a minimum of 5 years. The report shall document wetland hydrology on at least 2 acres of the site, mitigation measures completed to-date, vegetation planted to-date, and shall address each of the mitigation success criteria. The report shall include photographs from fixed reference points of the mitigation area to compare mitigation success from year to year. Photographs shall be taken from the same location and same orientation each year. Monitoring reports shall be submitted for 5 years or until the Corps agrees the mitigation has been successful for 3 consecutive years. The report shall identify any failure of the mitigation success criteria. Criteria for success must include a minimum of 80% aerial coverage of native plants, and a minimum of 2 acres (of the 2.5 acre site) must have documented wetland hydrology. If these criteria are not met, a revised plan shall be submitted that describes measures needed to bring the site into compliance with the mitigation plan. If failure occurs, additional monitoring may be specified by the Corps of Engineers.

8. Permittee shall implement the "Revegetation Plans for Fernan Lake Road," June 2007, Version 1.3 prepared by the Idaho Panhandle National Forests, to replace lost vegetation and habitat values on disturbed areas.

9. A professional environmental compliance inspector shall be assigned to the project at all times to assure proper placement and maintenance of erosion and sedimentation measures, supervise revegetation and planting work, and ensure compliance with the terms and conditions of this permit. The inspector may have other responsibilities but shall primarily be tasked with environmental compliance and placement of erosion control measures.

10. Permittee shall install fish habitat structures (trees and root wads) in all Fernan Lake riprap and the MSE wall embankment between Stations 61.48.5 and 65.78.98. Between Stations 71.60 (+/-) and 105 (+/-) shown on drawing Sheets 8-11 of 33, the permittee shall document pre-project fish habitat structures and replace the fish habitat structures at least one for one. Permittee shall document compliance with this condition in writing and provide documentation to the Corps of Engineers within 30 days of installing fish habitat structures.

11. Permittee shall minimize intrusive construction activities within 0.5 mile of the bald eagle nest on the south end of Fernan Lake, until July young have fledged. If the nest is inactive as determined by the project manager and the FHWA Environmental Manager, this requirement is waived. Permittee shall obtain a map of 0.5-mile area surrounding the nest from the USFWS in Spokane.

12. Project fills shall be designed to avoid the need to remove riparian trees and shrubs to the maximum extent practicable, to minimize loss of wildlife habitat. Trees to be retained shall be marked to avoid equipment damage and loss.

13. Permittee shall assure post project parking access at all planned areas to assure that important and safe public access be improved and maintained.

14. All culvert placements shall be on a 1% or flatter slope to assure fish passage.

15. Temporary fills for access authorized by this permit shall be removed from the waterway when they are no longer needed and prior to completion of the project.

Further Information:

1. Congressional Authorities. You have been authorized to undertake the activity described above pursuant to:

( ) Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403).

(X) Section 404 of the Clean Water Act (33 U.S.C. 1344).

( ) Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 (33 U.S.C. 1413).

2. Limits of this authorization.

a. This permit does not obviate the need to obtain other Federal, state, or local authorizations required by law.

b. This permit does not grant any property rights or exclusive privileges.

6. Extensions. General condition 1 establishes a time limit for the completion of the activity authorized by this permit. Unless there are circumstances requiring either a prompt completion of the authorized activity or a reevaluation of the public interest decision, the Corps will normally give you favorable consideration to a request for an extension of this time limit.

Your signature below, as permittee, indicates that you accept and agree to comply with the terms and conditions of this permit.

_____ _____

(PERMITTEE) *(DATE)*

This permit becomes effective when the Federal official, designated to act for the Secretary of the Army, has signed below.

_____ _____

(DISTRICT COMMANDER) *(DATE)*

When the structures or work authorized by this permit are still in existence at the time the property is transferred, the terms and conditions of this permit will continue to be binding on the new owner(s) of the property. To validate the transfer of this permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.

_____ _____

(TRANSFEREE) *(DATE)*

c. This permit does not authorize any injury to the property or rights of others.

d. This permit does not authorize interference with any existing or proposed Federal project.

3. Limits of Federal Liability. In issuing this permit, the Federal Government does not assume any liability for the following:

a. Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes.

b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest.

c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.

d. Design or construction deficiencies associated with the permitted work.

e. Damage claims associated with any future modification, suspension, or revocation of this permit.

4. Reliance on Applicant's Data. The determination of this office that issuance of this permit is not contrary to the public interest was made in reliance on the information you provided.

5. Reevaluation of Permit Decision. This office may reevaluate its decision on this permit at any time the circumstances warrant. Circumstances that could require a reevaluation include, but are not limited to, the following:

a. You fail to comply with the terms and conditions of this permit.

b. The information provided by you in support of your permit application proves to have been false, incomplete, or inaccurate (See 4 above).

c. Significant new information surfaces which this office did not consider in reaching the original public interest decision.

Such a reevaluation may result in a determination that it is appropriate to use the suspension, modification, and revocation procedures contained in 33 CFR 325.7 or enforcement procedures such as those contained in 33 CFR 326.4 and 326.5. The referenced enforcement procedures provide for the issuance of an administrative order requiring you to comply with the terms and conditions of your permit and for the initiation of legal action where appropriate. You will be required to pay for any corrective measure ordered by this office, and if you fail to comply with such directive, this office may in certain situations (such as those specified in 33 CFR 209.170) accomplish the corrective measures by contract or otherwise and bill you for the cost.

Table 1: Details regarding work below OHW / in wetlands (Refer to Figures)

Description	Station	Milepost	Type of Fill Material below OHW	In-Water Impacts: Area of Fill below OHW (ft^2)	In-Water Impacts: Volume of Fill below OHW (yd^3)	In-Water Impacts: Volume of excavation Below OHW (yd3)	Wetlands Impacts - Fill: Area of fill into wetlands (ft^2)	Wetlands Impacts - Fill: Volume of fill into wetlands (yd^3)	Wetlands Impacts - Fill: Type of fill material in wetlands	NOTES	Type of Excavated Material below OHW/wetlands
Fill Area 1	30+70	0.39	Culvert inlet	0	0	0	450	55	riprap	1	Existing road embankment and Native Lake Bed
Fill Area 2	52+00 to 54+25	0.80 to 0.84	Riprap Embankment	5,400	880	616	n/a	-	riprap	1,2	Existing road embankment and Native Lake Bed
Fill Area 3	61+49 to 65+79	0.98 to 1.06	MSE Wall - Riprap Embankment	10,344	2,529	1,770	n/a	-	riprap	1,3	Existing road embankment and Native Lake Bed
Fill Area 4	67+80	1.09	Culvert Replacement	-	-	n/a	235	29	roadway emb.	4	Existing road embankment and Native materials
Fill Area 5	72+00 to 80+90	1.17 to 1.34	Riprap Embankment	19,500	3,178	2,224	n/a	-	riprap	1,2	Existing road embankment and Native Lake Bed
Fill Area 6	87+80 to 89+30	1.47 to 1.50	Riprap Embankment	5,040	821	575	n/a	-	riprap	1,2	Existing road embankment and Native Lake Bed
Fill Area 7	103+75 to 104+80	1.78 to 1.80	Riprap Embankment	2,520	411	287	n/a	-	riprap	1,2	Existing road embankment and Native Lake Bed
Fill Area 8	116+50 to 120+94	2.02 to 2.10	Lily Pad Bay - New Bridge, Abutment riprap	1,338	109	76	n/a	-	na	1,4	Existing road embankment and Native Lake Bed
Fill Area 8	116+50 to 120+94	2.02 to 2.10	Lily Pad Bay - Temp. work pads	3,240	-	-	n/a	-	-	5	Temporary rock fill placed and removed
Lake Impact Subtotal				**47,382**			**685**	-			
SUBTotal Areas (Acres)				**1.09**		-	**0.02 AC**				
Fill Area 9	150+00 to 165+50	2.65 to 2.95	Roadway Embankment	12,300	1,367	-	3,100	344	riprap	1,2	Existing roadway embankment and native material
Fill Area 10	152+00 to 166+00	2.69 to 2.95	Roadway Embankment	3,500	428	n/a	10,500	1,167	riprap	1,4	Existing road embankment and Native materials
Fill Area 11	161+00 to 170+00	2.86 to 3.03	Roadway Embankment	16,400	4,677	n/a	1,800	-	riprap	1,4	Existing road embankment and Native Lake Bed
Fill Area 12	165+84	2.95	Culvert Replacement	1,150	141	n/a	1,600	142	native material	4	Existing road embankment and Native materials
Fill Area 13	166+50 to 170+00	2.96 to 3.03	Roadway Embankment	8,930	496		700	93	riprap	6	Existing roadway embankment and native material
Fill Area 14	170+66	3.04	Culvert Replacement	800	98	n/a	1,100	98	roadway emb.	4	Existing road embankment and Native materials
Fill Area 15	178+74	3.20	Culvert Replacement	1,200	147	n/a	1,300	173	roadway emb.	4	Existing road embankment and Native materials
Fill Area 16	178+75 to 191+20	3.20 to 3.43	Roadway Embankment	0	0	n/a	18,400	3,271	roadway emb.	1,4	Existing road embankment and Native Soils in wet ditch
Fill Area 17	199+36	3.59	Culvert Replacement	800	98	n/a	300	-	roadway emb.	1	Existing road embankment and Native materials
Fill Area 18	200+00 to 215+80	3.60 to 3.90	Stream Restoration	17,380	3,540	n/a	-	-	roadway emb.		Existing road embankment and Disturbed Stream Bed
Fill Area 19	206+22	3.72	Culvert Replacement	800	98	n/a	-	-	roadway emb.	1	Existing road embankment and Native materials
Fill Area 20	235+06	4.26	Culvert Replacement	1,060	130	n/a	500	67	roadway emb.	4	Existing road embankment and Native materials
Fill Area 21	240+37	4.36	Culvert Replacement	2,300	281	n/a	500	67	roadway emb.	1	Existing road embankment and Native materials
Fill Area 22	277+70	5.07	Culvert Replacement	2,550	312	n/a	1,550	207	roadway emb.	1	Existing road embankment and Native materials
Fill Area 23	282+00	5.15	Temporary culvert for material waste site	2,050	251	n/a	0	-	roadway emb.	4	Existing road embankment and Native materials
Stream Segment Impact Subtotal				**71,220**	-	-	**41,350**	-	-		-
SUBTotal Areas (Acres)				**1.63 AC**	-	-	**0.95 AC**	-	-		-
TOTAL IMPACT AREA (Acres)				**2.72 AC**	-	-	**0.96 AC**	-	-		-

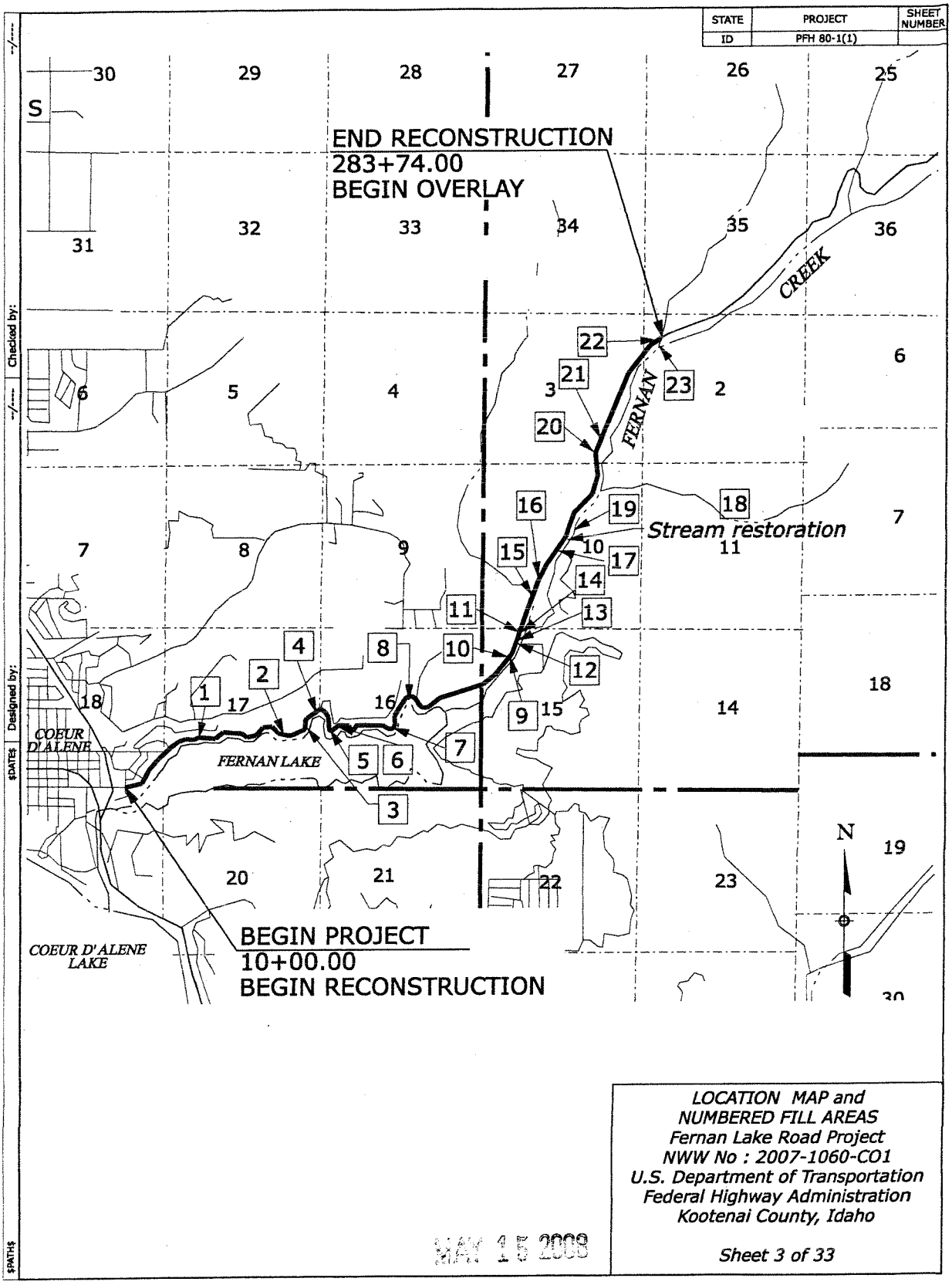
Note:

1 Excavation and Fill necessary for culvert replacement, inlet/outlet treatments, to accommodate riprap placement or roadway embankment.
2 Required for structural support of Roadway Fills
3 Required for erosion protection of roadway elements (MSE Wall, Bridge Abutment, etc)
4 Values (ft^2) used in determining cumulative impacts to wetlands
5 These are temporary rock work pads for construction of the bridge and they will be removed when the causeway is obliterated.
6 Rock Embankment placed to stabilize eroding roadway shoulder. Assumes 50% of volume is impacting the wetland or below OHW. This area will be revegetated with riparian plantings by USFS.

Table 2: Wetland Restoration and mitigation areas (Refer to Figures)

Description	Location of Culvert		Type of Fill Material below OHW	Area of Excavation below OHW (square feet)	Mitigation Area to be Purchased (Acres)	Volume of Excavation below OHW (yd3)	Area of excavation for wetland mitigation (Square Feet)	NOTES	Volume of excavation for wetland mitigation (yd3)	Type of Excavated Material for wetland mitigation
	Station	Milepost								
Fill Area 8	116+50 to 120+94	2.02 to 2.10	Lily Pad Bay - Removal of Causeway Fill	13,041		3,188	13,041	1	4,250	Existing road embankment and Native Lake Bed
sheet 31 of 31	148+00 to 153+00	2.61 to 2.71	Stream Restoration	na	2.50	na	na		na	na
Fill Area 18	200+00 to 215+80	3.60 to 3.90	Stream Restoration	na	na	na	44,800	1	1,401	Hay Pasture
	Totals			**13,041**		**3,188**	**57,841**		**5,651**	-
	Total Areas of Wetland Mitigation (Acres)			**0.30 Acres**	**2.50 Acres**		**1.33 Acres**		-	-

Note:
1 This area is used as an area credit, as it is a restorative action being taken.



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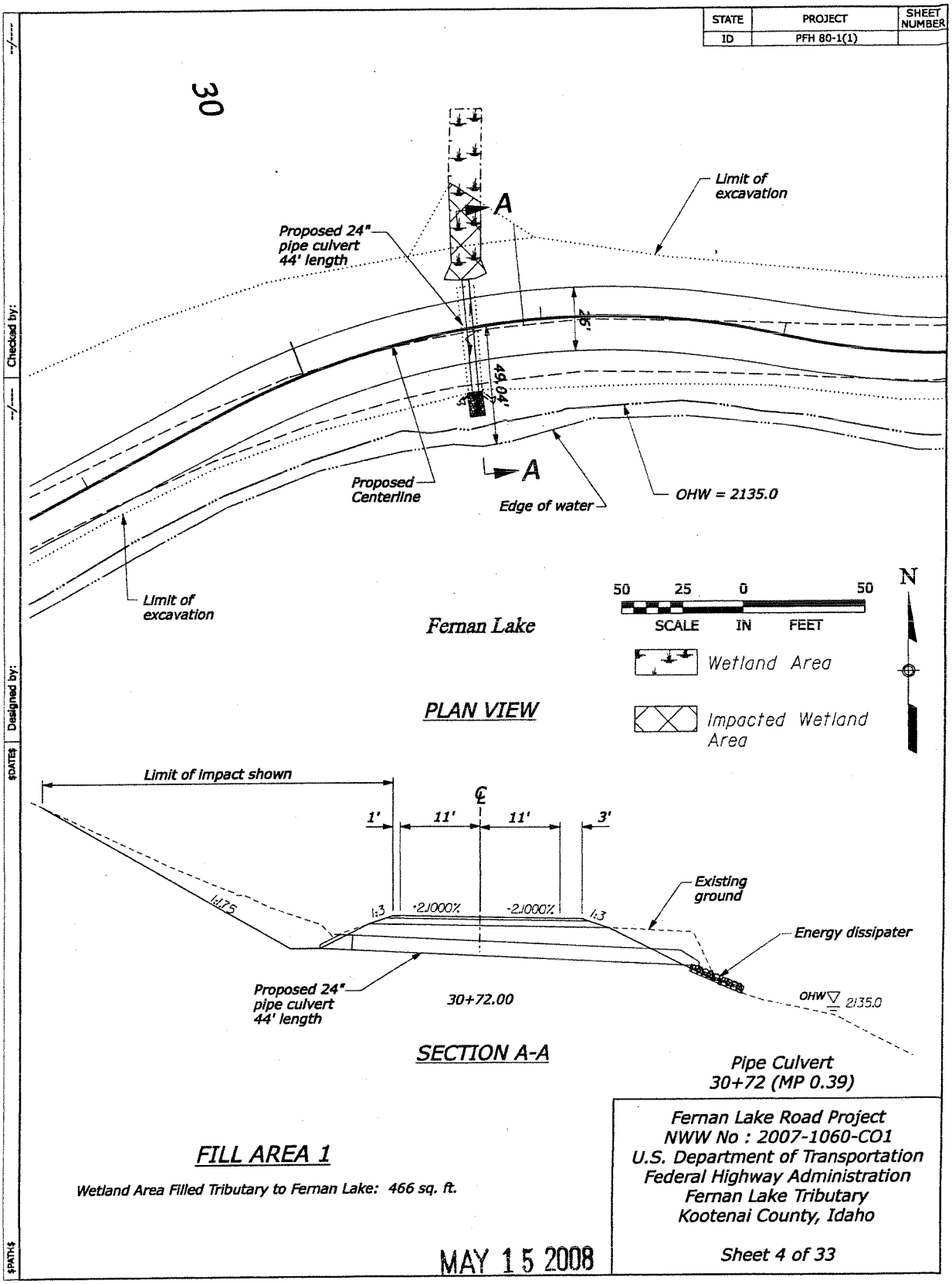
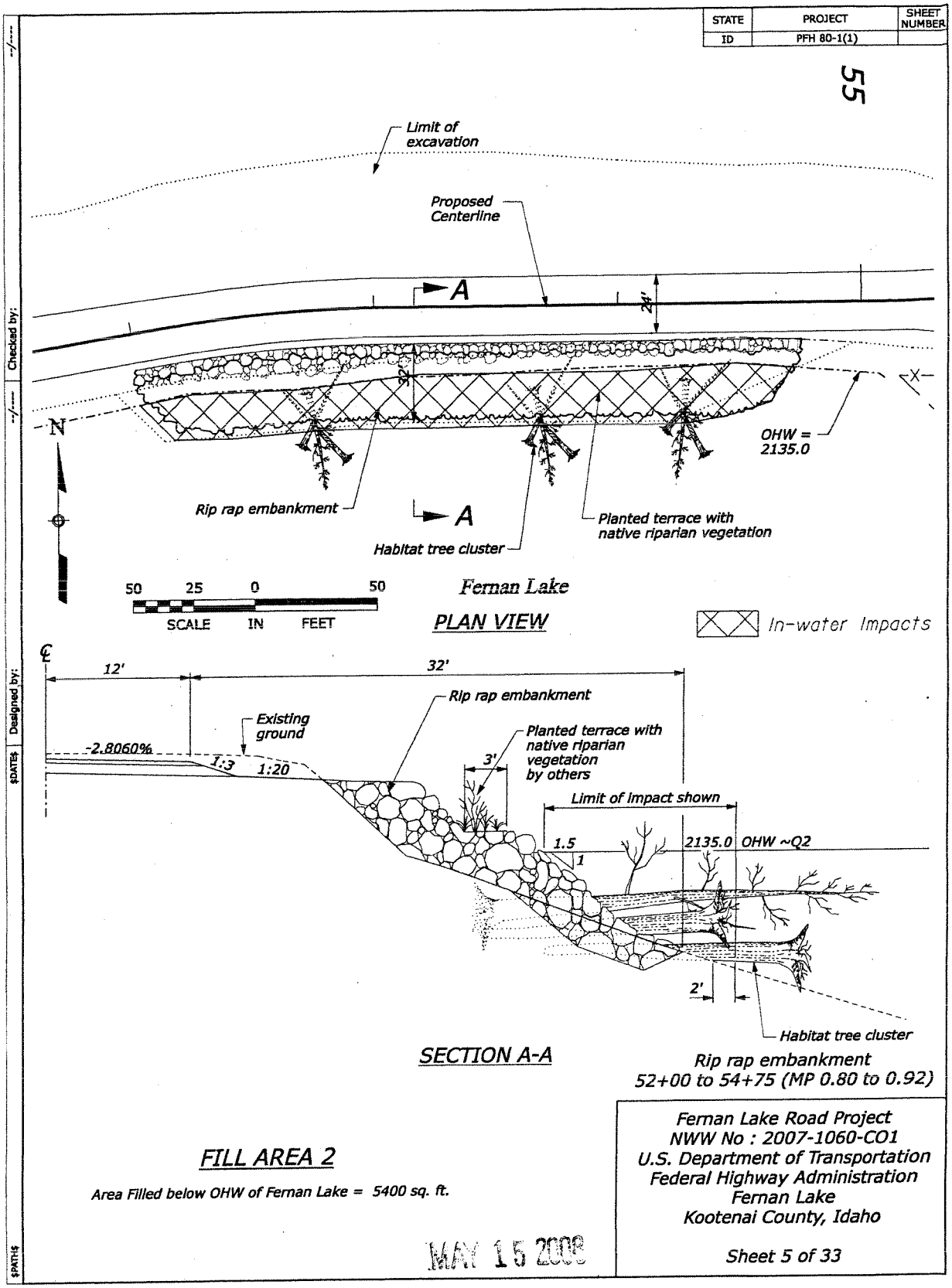
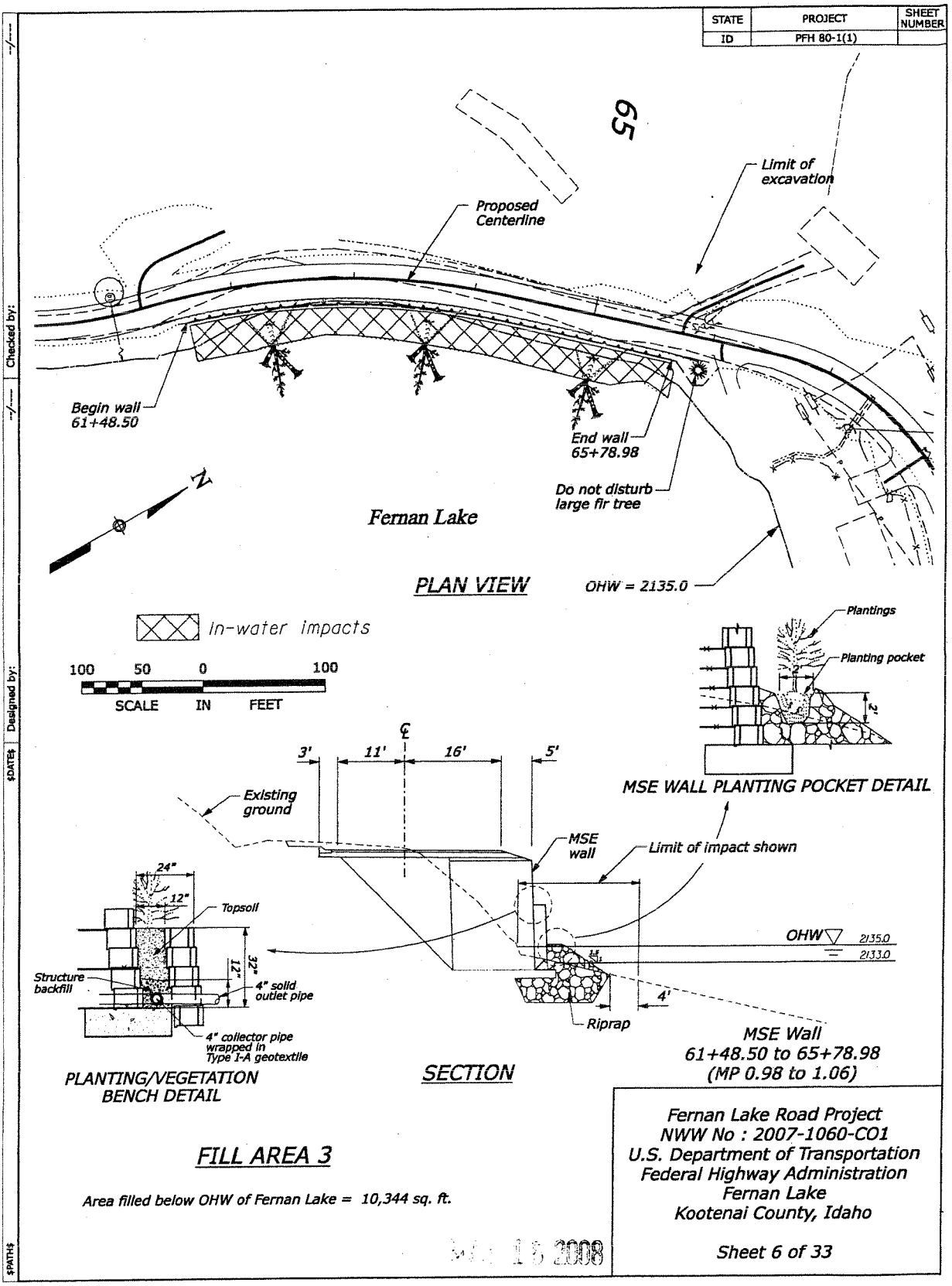


Permits
Project: ID PFH 801-(1)Fernan Lake Road



Permits
Project: ID PFH 801-(1)Fernan Lake Road


STATE
ID
PROJECT
PFH 80-1(1)
SHEET NUMBER
65
Limit of excavation
Proposed Centerline
Begin wall 61+48.50
End wall 65+78.98
Do not disturb large fir tree
Fernan Lake
N
PLAN VIEW
OHW = 2135.0
In-water impacts
100 50 0 100
SCALE IN FEET
Plantings
Planting pocket
2'
2'
MSE WALL PLANTING POCKET DETAIL
℄
3'
11'
16'
5'
Existing ground
MSE wall
Limit of impact shown
24"
12"
Topsoil
32"
12"
Structure backfill
4" solid outlet pipe
4" collector pipe wrapped in Type I-A geotextile
OHW 2135.0
2133.0
4'
Riprap
PLANTING/VEGETATION BENCH DETAIL
SECTION
MSE Wall
61+48.50 to 65+78.98
(MP 0.98 to 1.06)
FILL AREA 3
Area filled below OHW of Fernan Lake = 10,344 sq. ft.
Fernan Lake Road Project
NWW No : 2007-1060-CO1
U.S. Department of Transportation
Federal Highway Administration
Fernan Lake
Kootenai County, Idaho
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Designed by:
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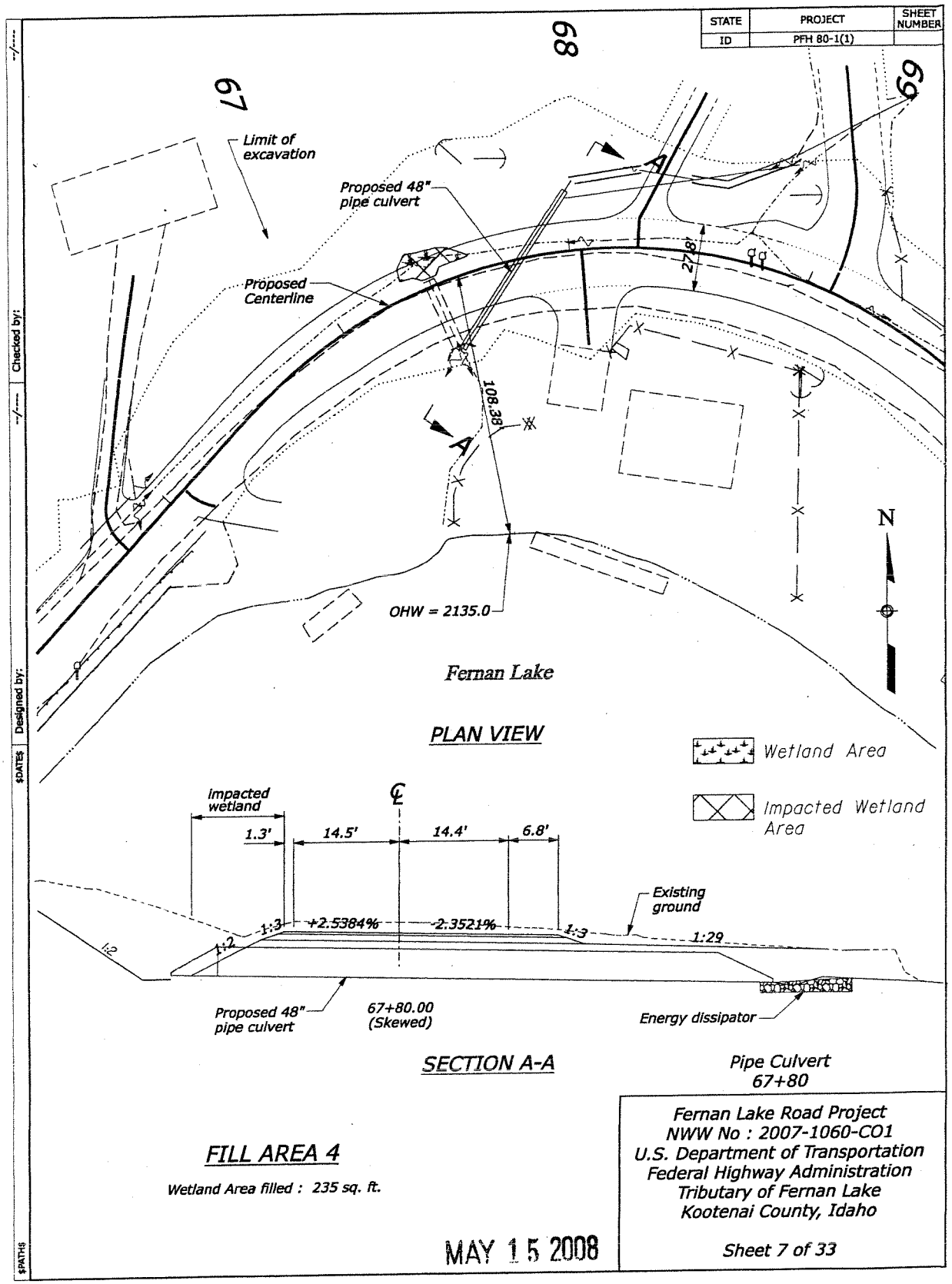
$PATH$


STATE
ID
PROJECT
PFH 80-1(1)
SHEET NUMBER
67
68
69
Limit of excavation
Proposed 48" pipe culvert
Proposed Centerline
27.8'
108.38'
A
A
OHW = 2135.0
Fernan Lake
N
PLAN VIEW
Wetland Area
Impacted Wetland Area
Impacted wetland
1.3'
14.5'
14.4'
6.8'
Existing ground
1:3
+2.5384%
-2.3521%
1:3
1:29
1:2
1:2
Proposed 48" pipe culvert
67+80.00 (Skewed)
Energy dissipator
SECTION A-A
Pipe Culvert
67+80
FILL AREA 4
Wetland Area filled : 235 sq. ft.
Fernan Lake Road Project
NWW No : 2007-1060-CO1
U.S. Department of Transportation
Federal Highway Administration
Tributary of Fernan Lake
Kootenai County, Idaho
Sheet 7 of 33
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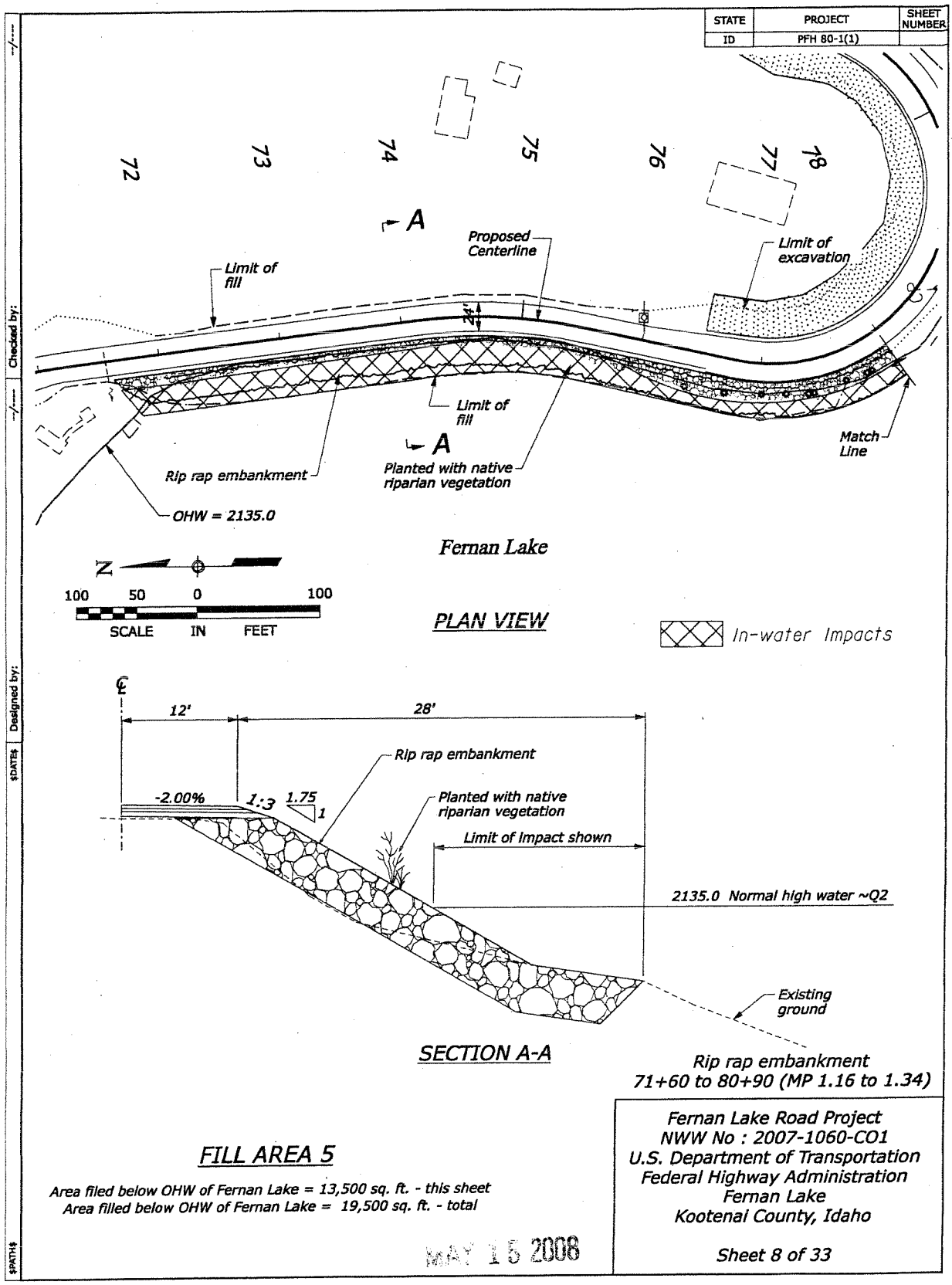
STATE
ID
PROJECT
PFH 80-1(1)
SHEET NUMBER
72
73
74
75
76
77
78
A
A
Proposed Centerline
Limit of fill
Limit of excavation
Limit of fill
Match Line
Rip rap embankment
Planted with native riparian vegetation
OHW = 2135.0
Fernan Lake
N
100 50 0 100
SCALE IN FEET
PLAN VIEW
In-water Impacts
12'
28'
Rip rap embankment
-2.00%
1:3
1.75
1
Planted with native riparian vegetation
Limit of Impact shown
2135.0 Normal high water ~Q2
Existing ground
SECTION A-A
Rip rap embankment
71+60 to 80+90 (MP 1.16 to 1.34)
FILL AREA 5
Area filed below OHW of Fernan Lake = 13,500 sq. ft. - this sheet
Area filled below OHW of Fernan Lake = 19,500 sq. ft. - total
MAY 15 2008
Fernan Lake Road Project
NWW No : 2007-1060-CO1
U.S. Department of Transportation
Federal Highway Administration
Fernan Lake
Kootenai County, Idaho
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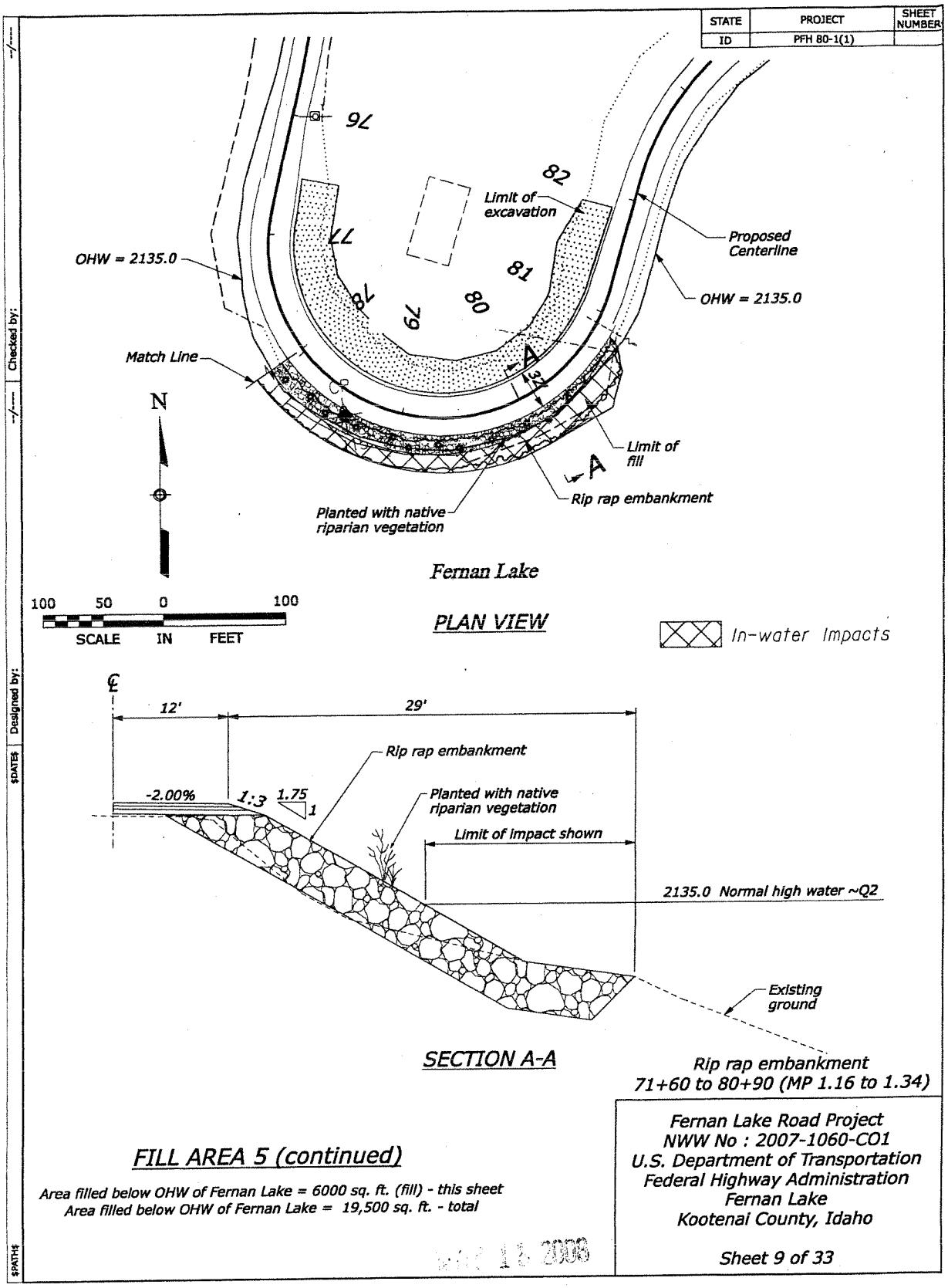
STATE
ID
PROJECT
PFH 80-1(1)
SHEET NUMBER
Limit of excavation
Proposed Centerline
OHW = 2135.0
OHW = 2135.0
Match Line
Limit of fill
Rip rap embankment
Planted with native riparian vegetation
N
Fernan Lake
100 50 0 100
SCALE IN FEET
PLAN VIEW
In-water Impacts
12'
29'
Rip rap embankment
-2.00%
1:3
1.75
1
Planted with native riparian vegetation
Limit of impact shown
2135.0 Normal high water ~Q2
Existing ground
SECTION A-A
Rip rap embankment
71+60 to 80+90 (MP 1.16 to 1.34)
FILL AREA 5 (continued)
Area filled below OHW of Fernan Lake = 6000 sq. ft. (fill) - this sheet
Area filled below OHW of Fernan Lake = 19,500 sq. ft. - total
Fernan Lake Road Project
NWW No : 2007-1060-CO1
U.S. Department of Transportation
Federal Highway Administration
Fernan Lake
Kootenai County, Idaho
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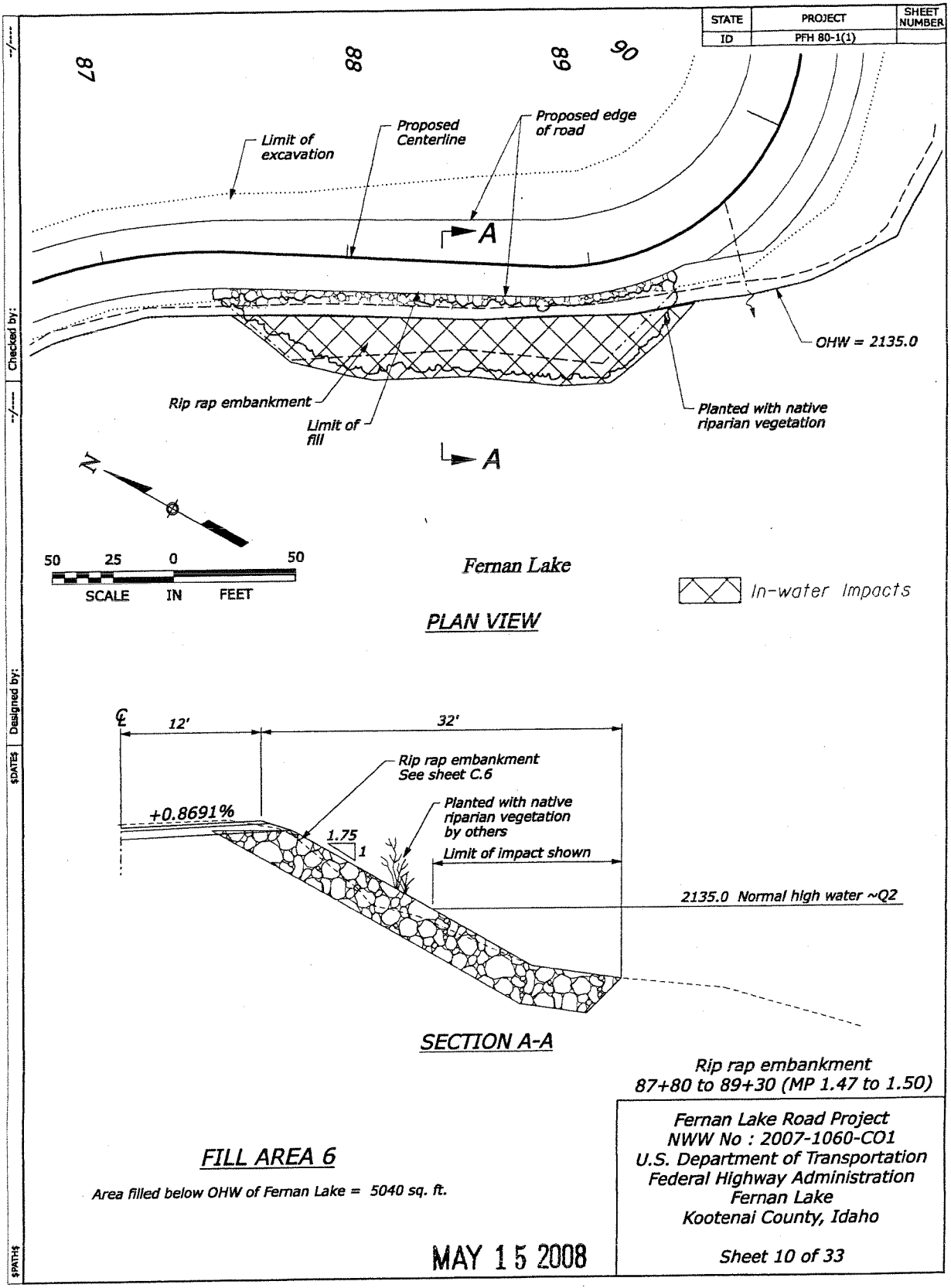
STATE
ID
PROJECT
PFH 80-1(1)
SHEET NUMBER
87
88
89
90
Limit of excavation
Proposed Centerline
Proposed edge of road
A
OHW = 2135.0
Rip rap embankment
Limit of fill
Planted with native riparian vegetation
A
N
50 25 0 50
SCALE IN FEET
Fernan Lake
In-water Impacts
PLAN VIEW
℄
12'
32'
Rip rap embankment
See sheet C.6
+0.8691%
1.75
1
Planted with native riparian vegetation by others
Limit of impact shown
2135.0 Normal high water ~Q2
SECTION A-A
Rip rap embankment
87+80 to 89+30 (MP 1.47 to 1.50)
FILL AREA 6
Area filled below OHW of Fernan Lake = 5040 sq. ft.
MAY 15 2008
Fernan Lake Road Project
NWW No : 2007-1060-CO1
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Federal Highway Administration
Fernan Lake
Kootenai County, Idaho
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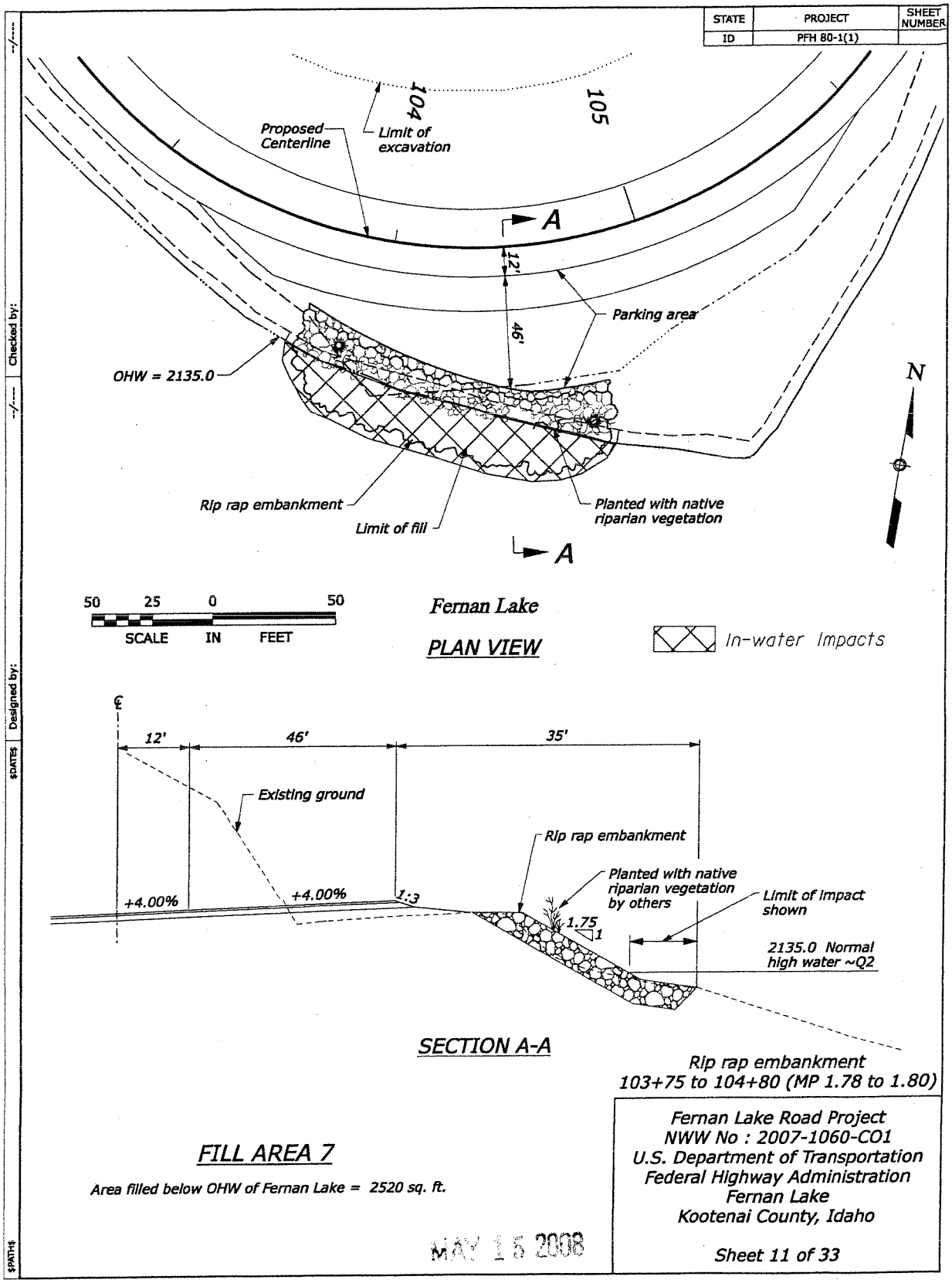

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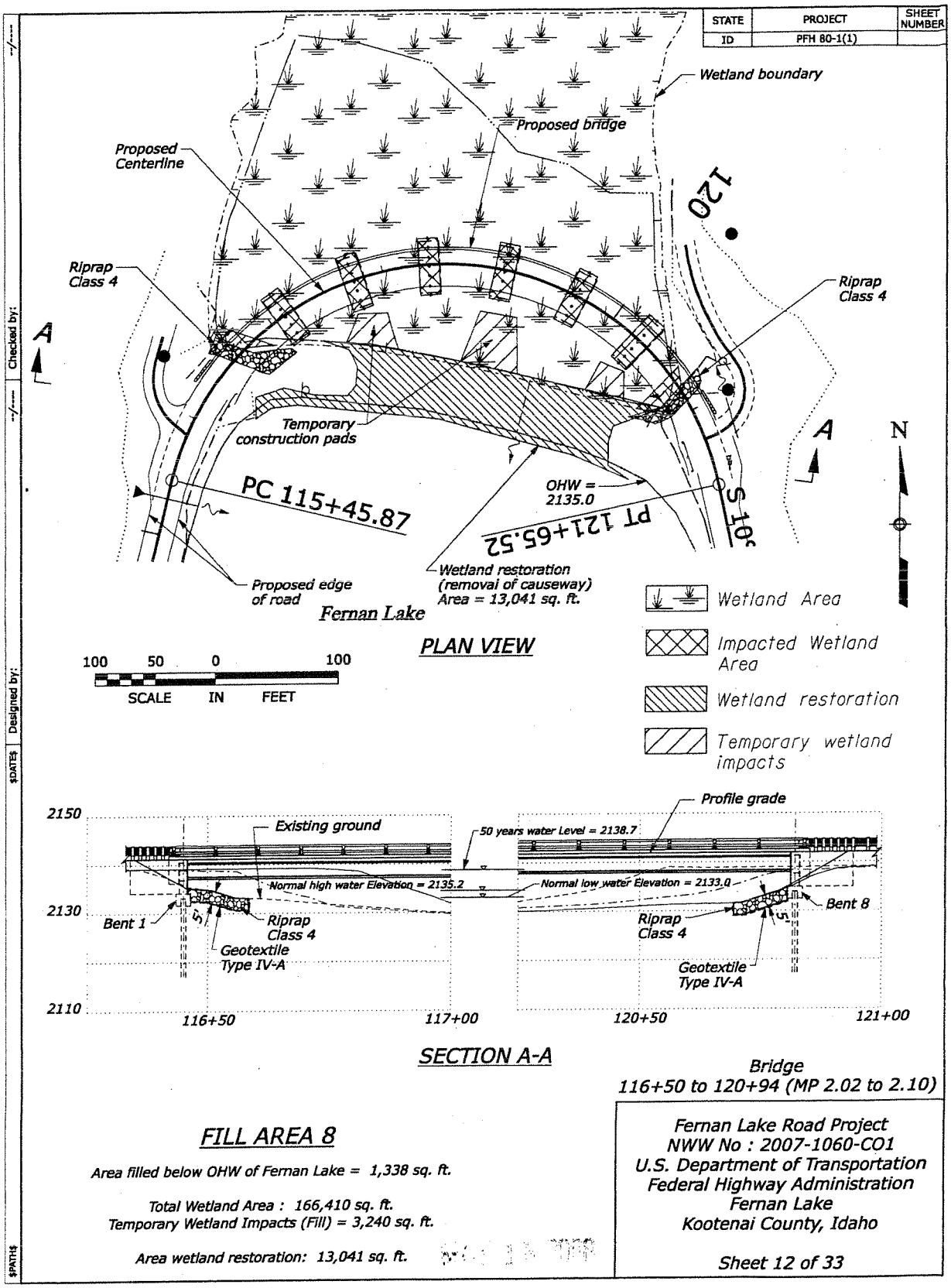

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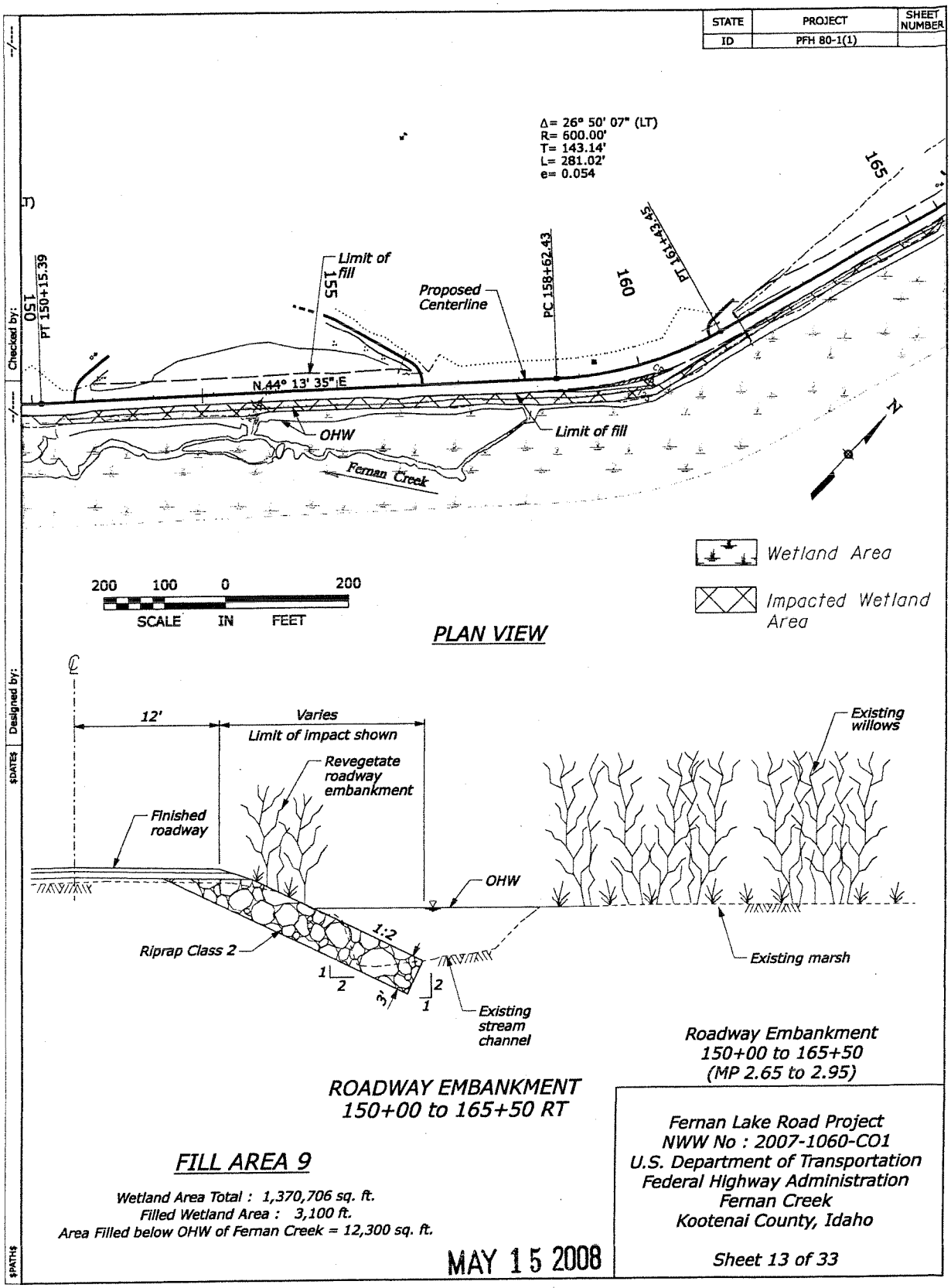
Project: ID PFH 801-(1)Fernan Lake Road



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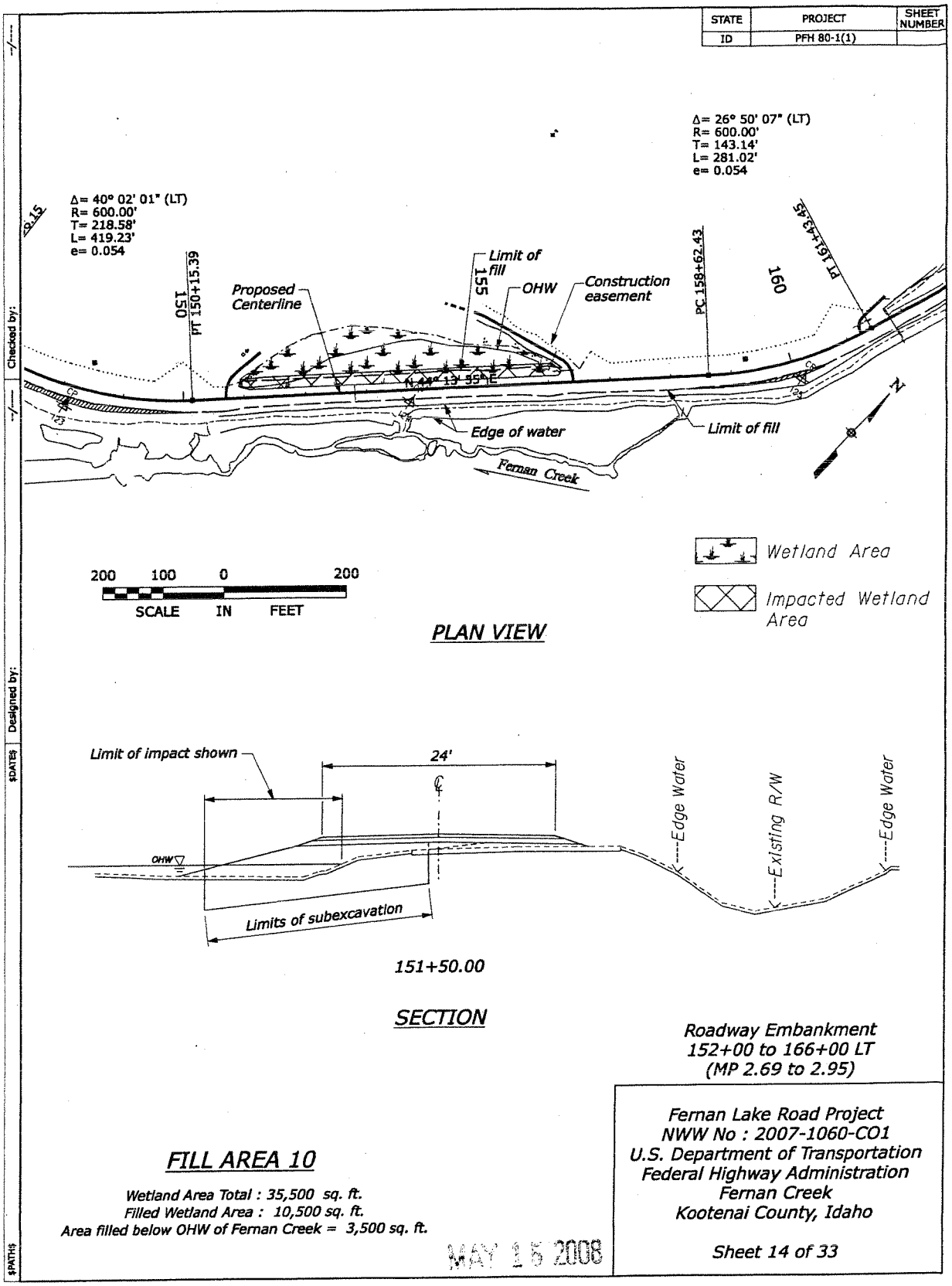
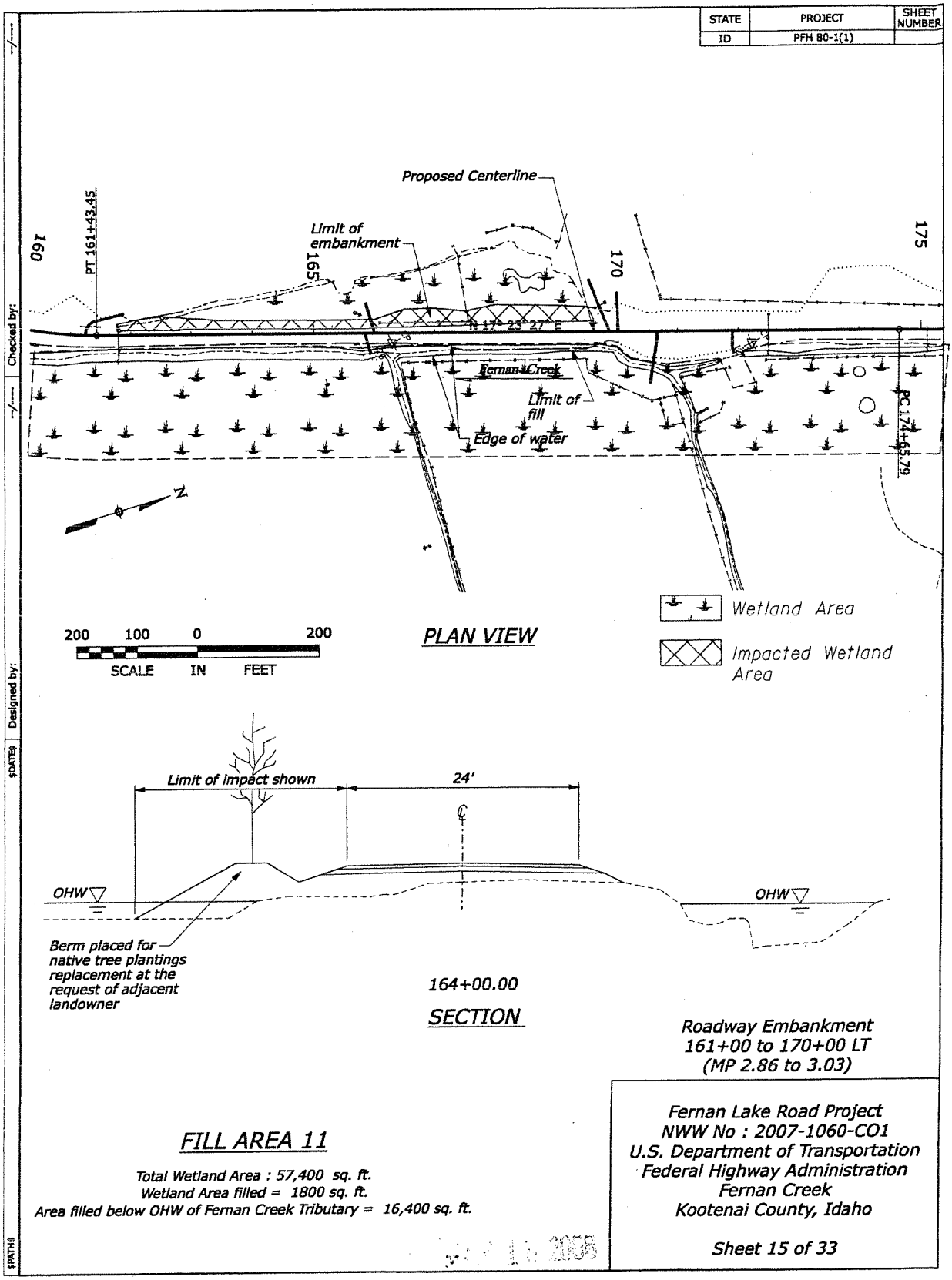
Project: ID PFH 801-(1)Fernan Lake Road



Permits
Project: ID PFH 801-(1)Fernan Lake Road


STATE
ID
PROJECT
PFH 80-1(1)
SHEET NUMBER
Proposed Centerline
Limit of embankment
PT 161+43.45
160
165
170
175
N 17° 23' 27" E
Fernan Creek
Limit of fill
Edge of water
PC 174+65.79
N
200 100 0 200
SCALE IN FEET
PLAN VIEW
Wetland Area
Impacted Wetland Area
Limit of impact shown
24'
OHW
OHW
Berm placed for native tree plantings replacement at the request of adjacent landowner
164+00.00
SECTION
Roadway Embankment
161+00 to 170+00 LT
(MP 2.86 to 3.03)
FILL AREA 11
Total Wetland Area : 57,400 sq. ft.
Wetland Area filled = 1800 sq. ft.
Area filled below OHW of Fernan Creek Tributary = 16,400 sq. ft.
Fernan Lake Road Project
NWW No : 2007-1060-CO1
U.S. Department of Transportation
Federal Highway Administration
Fernan Creek
Kootenai County, Idaho
Sheet 15 of 33
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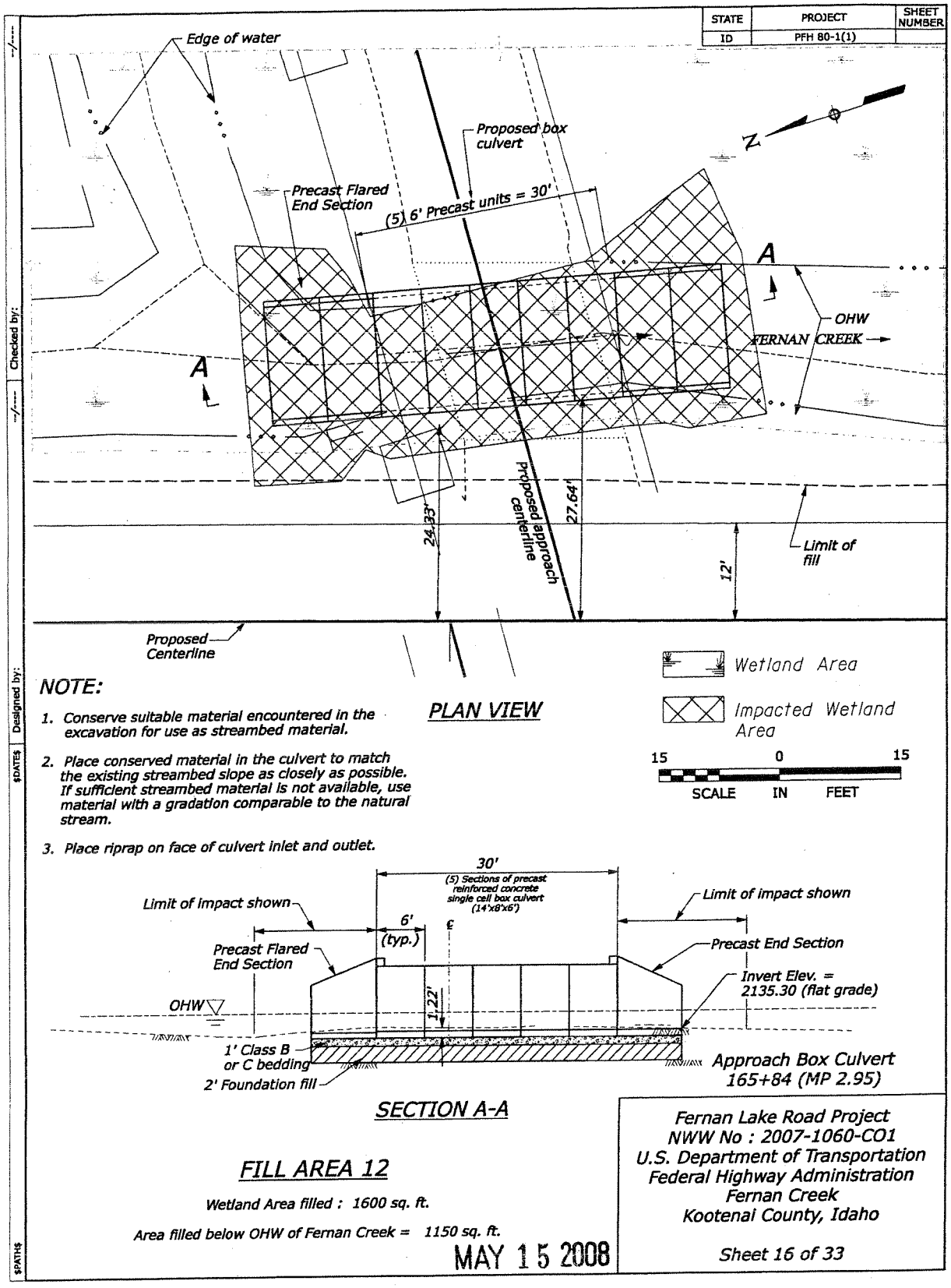
STATE
ID
PROJECT
PFH 80-1(1)
SHEET NUMBER
Edge of water
Proposed box culvert
Precast Flared End Section
(5) 6' Precast units = 30'
N
A
A
OHW
FERNAN CREEK
Proposed approach centerline
24.33'
27.64'
12'
Limit of fill
Proposed Centerline
Wetland Area
Impacted Wetland Area
15 0 15
SCALE IN FEET
NOTE:
1. Conserve suitable material encountered in the excavation for use as streambed material.
2. Place conserved material in the culvert to match the existing streambed slope as closely as possible. If sufficient streambed material is not available, use material with a gradation comparable to the natural stream.
3. Place riprap on face of culvert inlet and outlet.
PLAN VIEW
30'
(5) Sections of precast reinforced concrete single cell box culvert (14'x8'x6')
Limit of impact shown
6' (typ.)
Limit of impact shown
Precast Flared End Section
Precast End Section
Invert Elev. = 2135.30 (flat grade)
OHW
1.22'
1' Class B or C bedding
2' Foundation fill
Approach Box Culvert 165+84 (MP 2.95)
SECTION A-A
FILL AREA 12
Wetland Area filled : 1600 sq. ft.
Area filled below OHW of Fernan Creek = 1150 sq. ft.
MAY 15 2008
Fernan Lake Road Project
NWW No : 2007-1060-CO1
U.S. Department of Transportation
Federal Highway Administration
Fernan Creek
Kootenai County, Idaho
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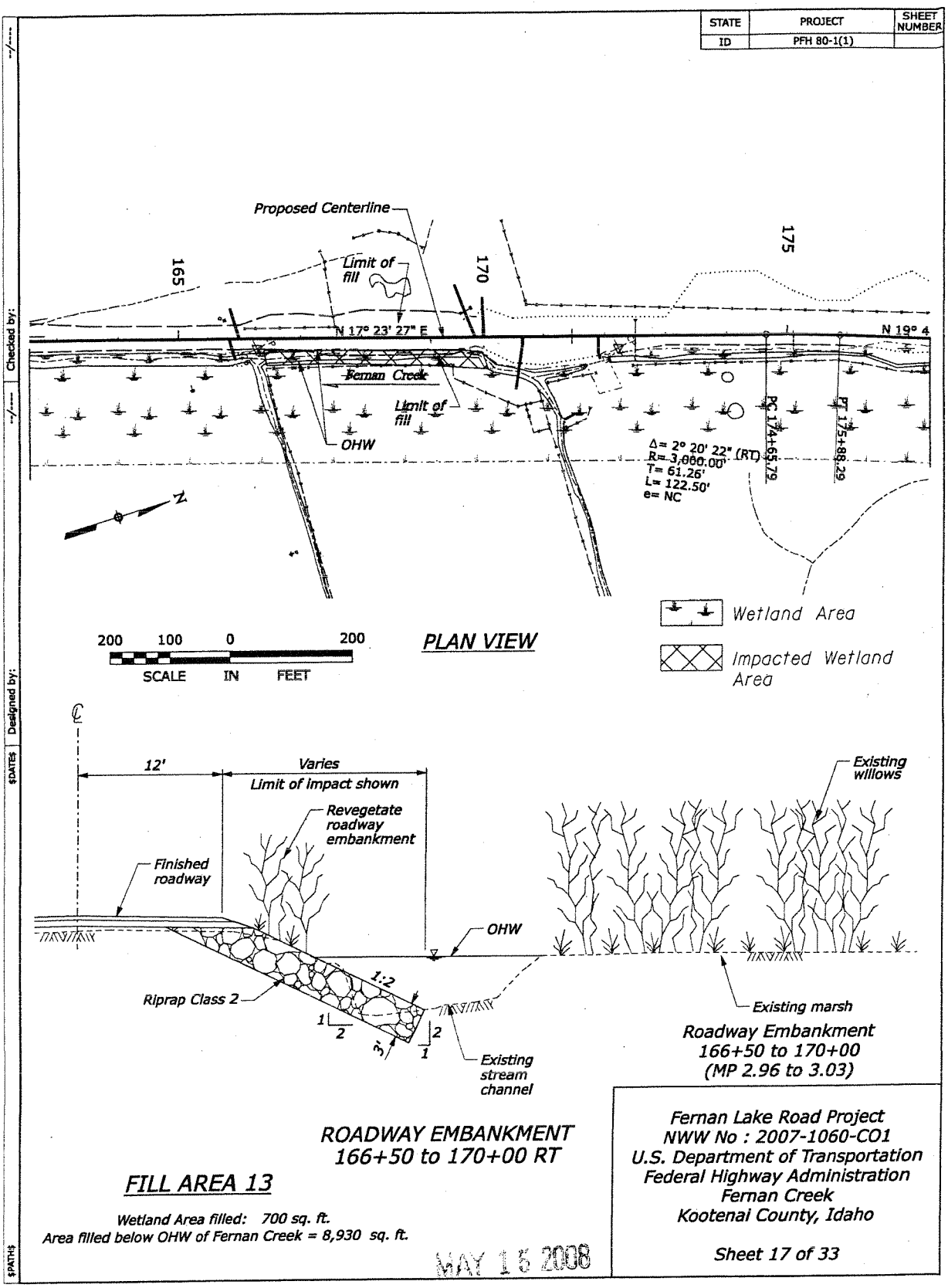
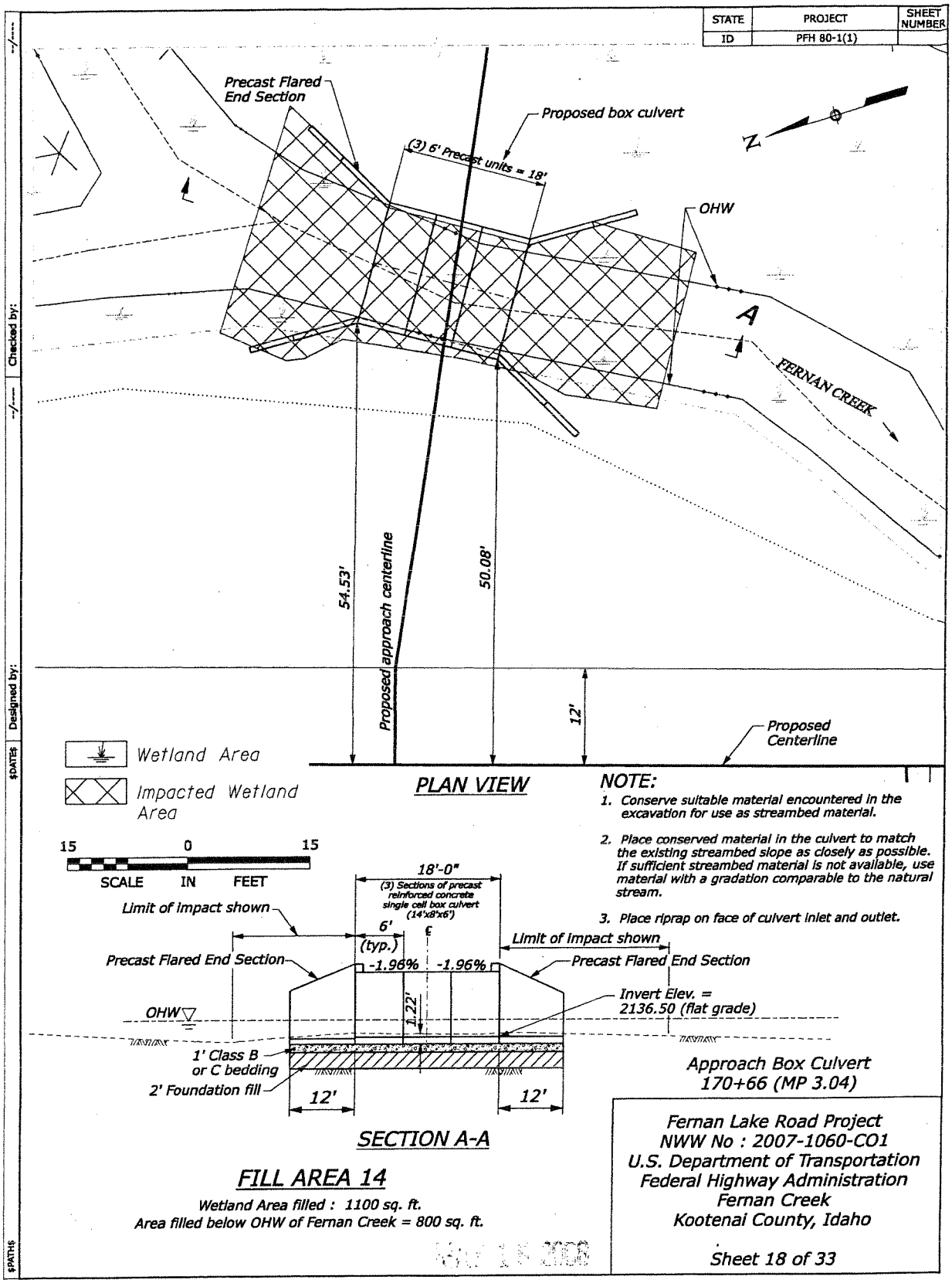
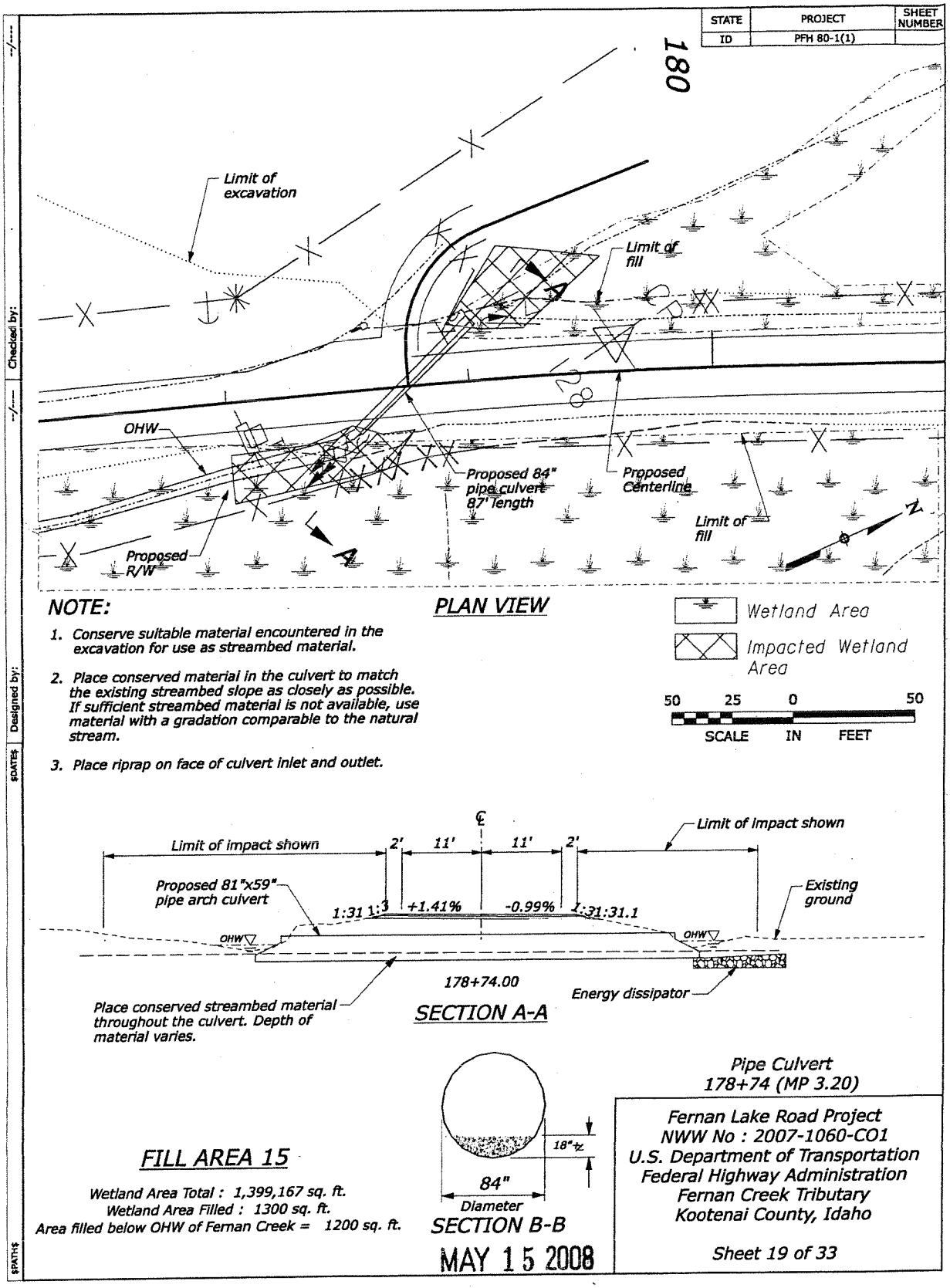
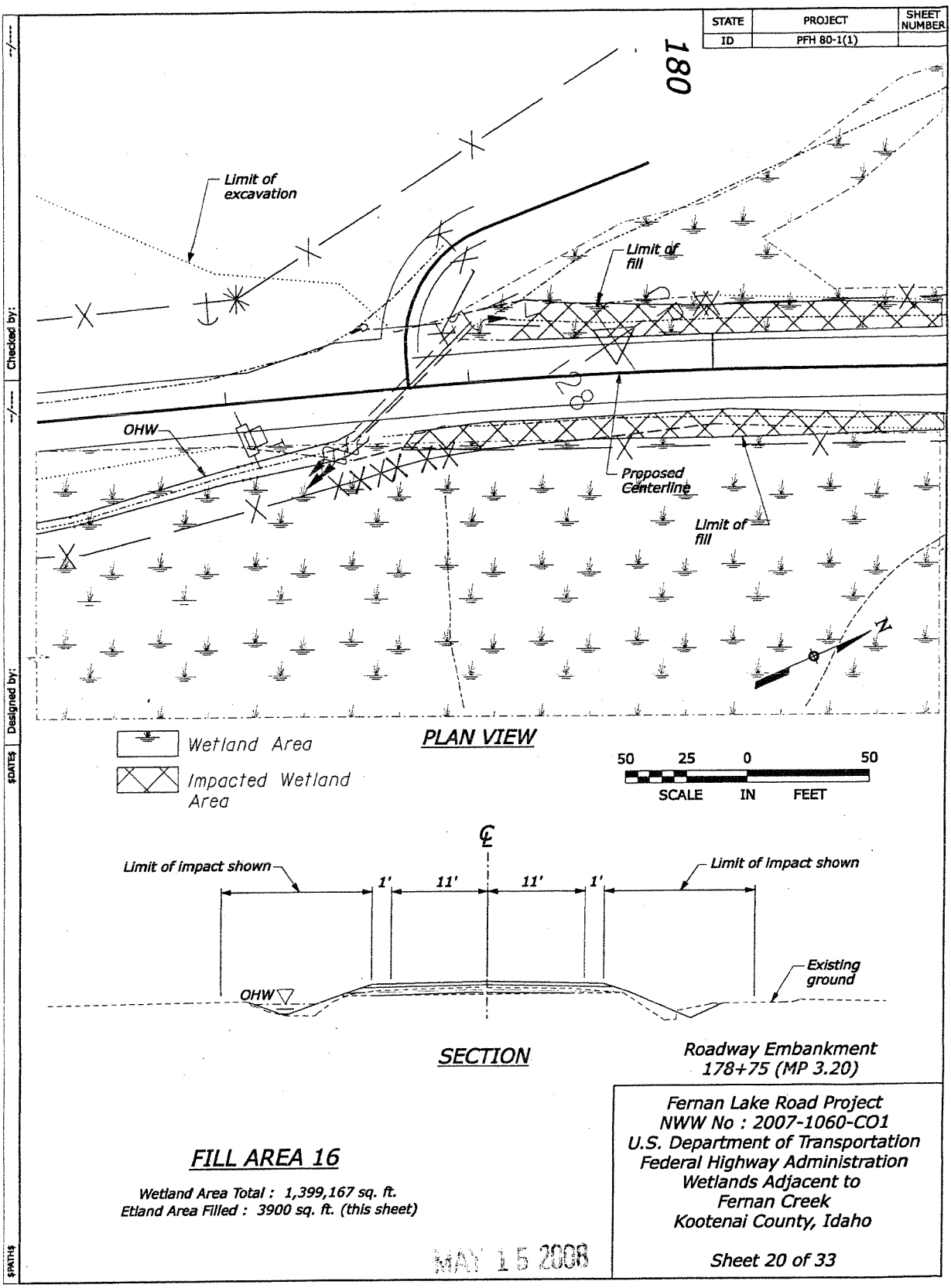


Permits
Project: ID PFH 801-(1)Fernan Lake Road

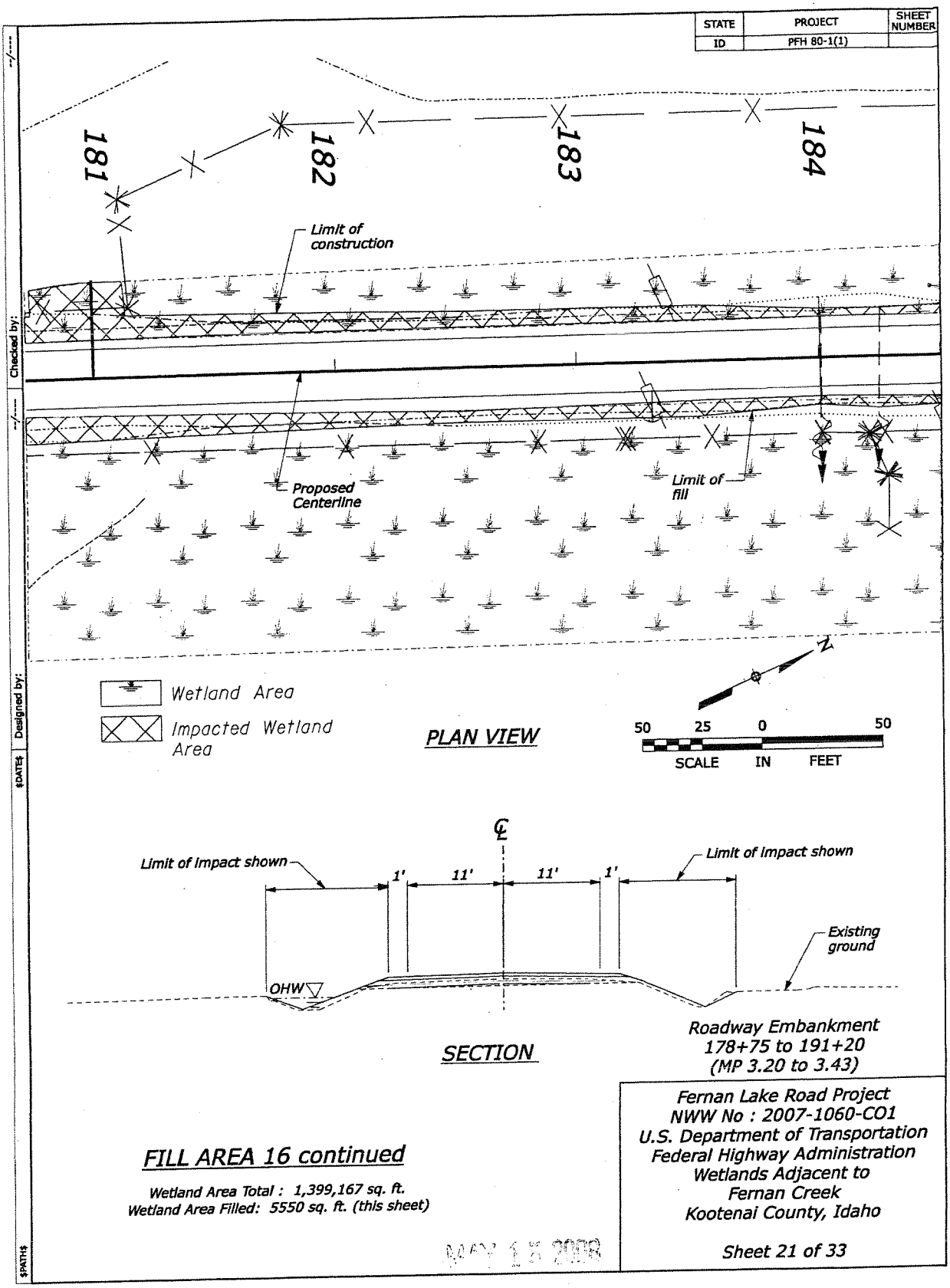


Permits
Project: ID PFH 801-(1)Fernan Lake Road

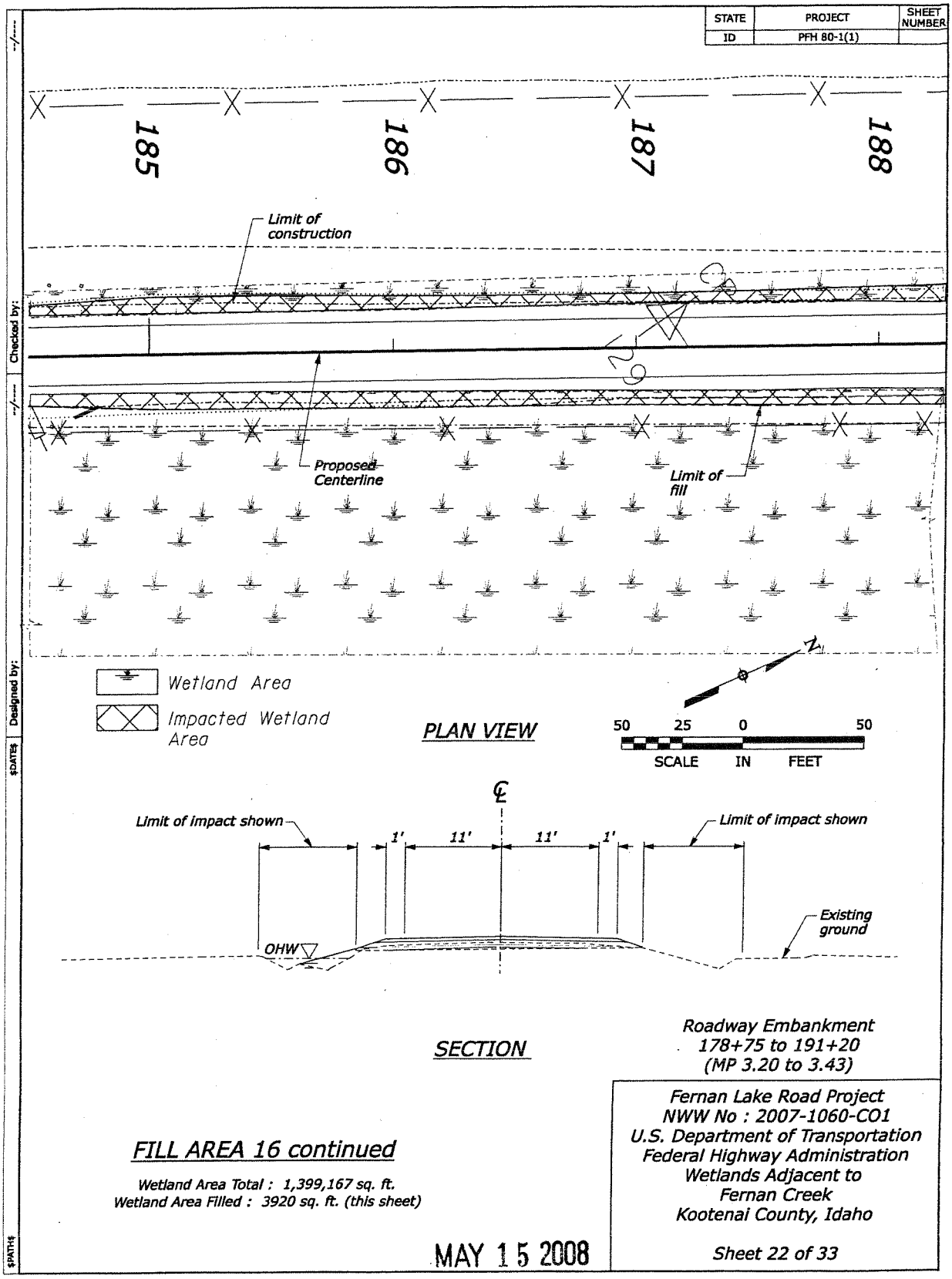

STATE
ID
PROJECT
PFH 80-1(1)
SHEET NUMBER
180
Limit of excavation
Limit of fill
OHW
Proposed 84" pipe culvert 87' length
Proposed Centerline
Limit of fill
Proposed R/W
A
A
N
PLAN VIEW
Wetland Area
Impacted Wetland Area
50 25 0 50
SCALE IN FEET
NOTE:
1. Conserve suitable material encountered in the excavation for use as streambed material.
2. Place conserved material in the culvert to match the existing streambed slope as closely as possible. If sufficient streambed material is not available, use material with a gradation comparable to the natural stream.
3. Place riprap on face of culvert inlet and outlet.
℄
Limit of impact shown
2'
11'
11'
2'
Limit of impact shown
Proposed 81"x59" pipe arch culvert
1:3
1:3
+1.41%
-0.99%
1:3
1:31.1
Existing ground
OHW
OHW
178+74.00
Energy dissipator
Place conserved streambed material throughout the culvert. Depth of material varies.
SECTION A-A
18"
84"
Diameter
SECTION B-B
Pipe Culvert
178+74 (MP 3.20)
FILL AREA 15
Wetland Area Total : 1,399,167 sq. ft.
Wetland Area Filled : 1300 sq. ft.
Area filled below OHW of Fernan Creek = 1200 sq. ft.
Fernan Lake Road Project
NWW No : 2007-1060-CO1
U.S. Department of Transportation
Federal Highway Administration
Fernan Creek Tributary
Kootenai County, Idaho
Sheet 19 of 33
MAY 15 2008
Checked by:
Designed by:
$DATE$
$PATH$

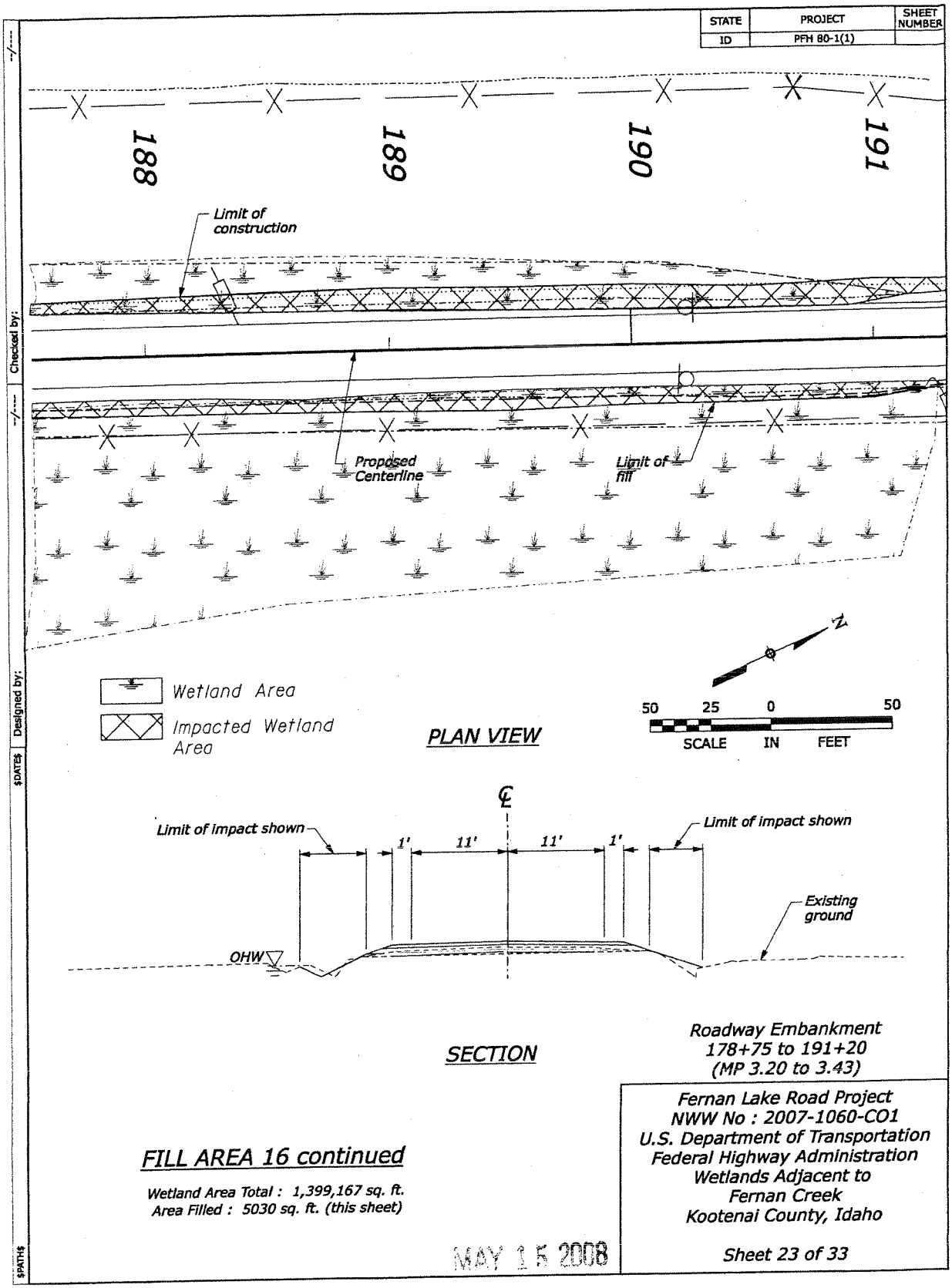


Permits
Project: ID PFH 801-(1)Fernan Lake Road



Permits
Project: ID PFH 801-(1)Fernan Lake Road


STATE
ID
PROJECT
PFH 80-1(1)
SHEET NUMBER
185
186
187
188
Limit of construction
Proposed Centerline
Limit of fill
Wetland Area
Impacted Wetland Area
PLAN VIEW
50 25 0 50
SCALE IN FEET
Limit of impact shown
1'
11'
11'
1'
Limit of impact shown
Existing ground
OHW
SECTION
Roadway Embankment
178+75 to 191+20
(MP 3.20 to 3.43)
FILL AREA 16 continued
Wetland Area Total : 1,399,167 sq. ft.
Wetland Area Filled : 3920 sq. ft. (this sheet)
MAY 15 2008
Fernan Lake Road Project
NWW No : 2007-1060-CO1
U.S. Department of Transportation
Federal Highway Administration
Wetlands Adjacent to
Fernan Creek
Kootenai County, Idaho
Sheet 22 of 33
Checked by:
Designed by:
$DATE$
$PATH$


STATE
ID
PROJECT
PFH 80-1(1)
SHEET NUMBER
188
189
190
191
Limit of construction
Proposed Centerline
Limit of fill
Wetland Area
Impacted Wetland Area
PLAN VIEW
N
50 25 0 50
SCALE IN FEET
℄
Limit of impact shown
1'
11'
11'
1'
Limit of impact shown
Existing ground
OHW
SECTION
Roadway Embankment
178+75 to 191+20
(MP 3.20 to 3.43)
FILL AREA 16 continued
Wetland Area Total : 1,399,167 sq. ft.
Area Filled : 5030 sq. ft. (this sheet)
Fernan Lake Road Project
NWW No : 2007-1060-CO1
U.S. Department of Transportation
Federal Highway Administration
Wetlands Adjacent to
Fernan Creek
Kootenai County, Idaho
Sheet 23 of 33
MAY 15 2008
Checked by:
Designed by:
$DATE$
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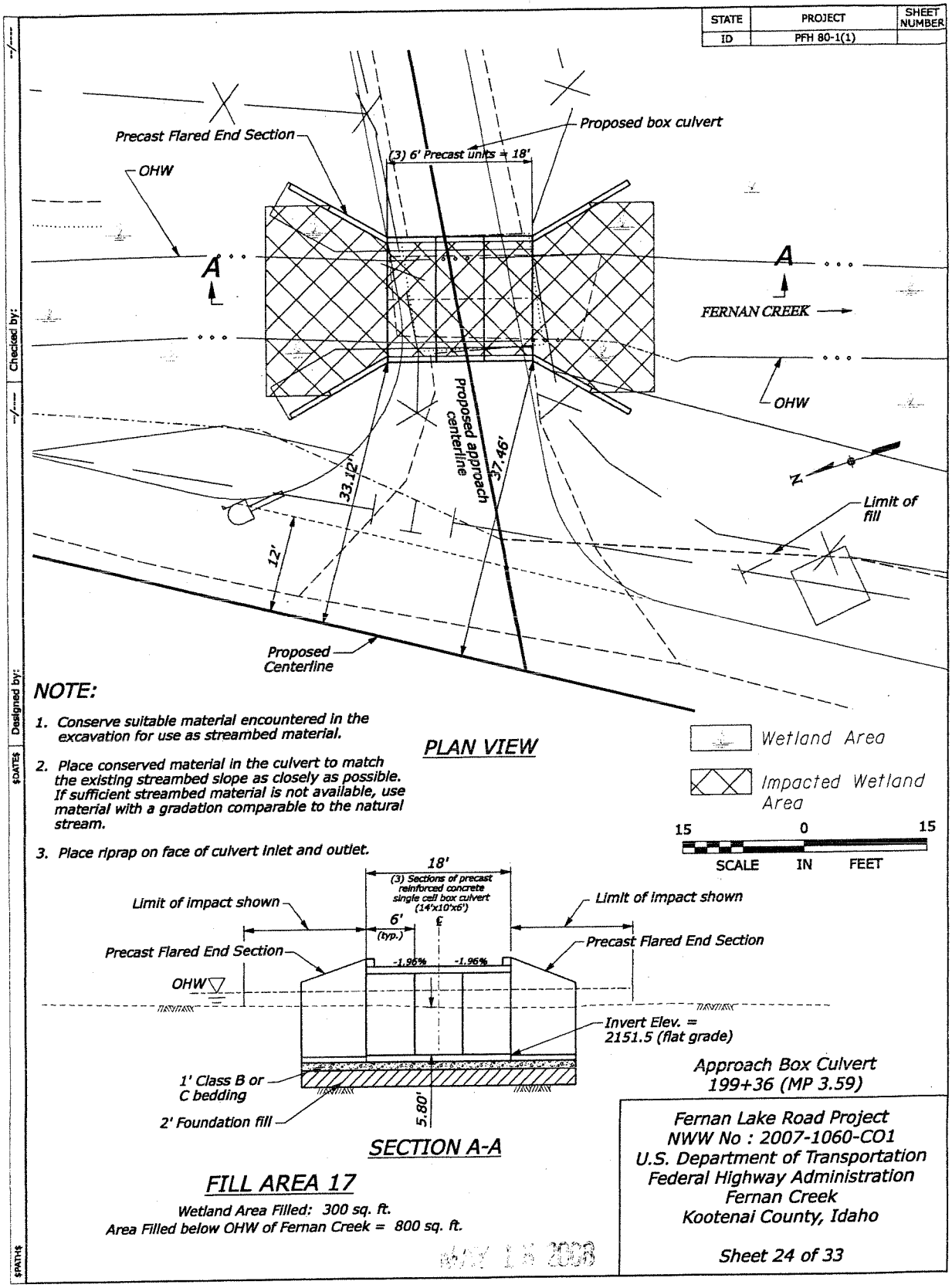
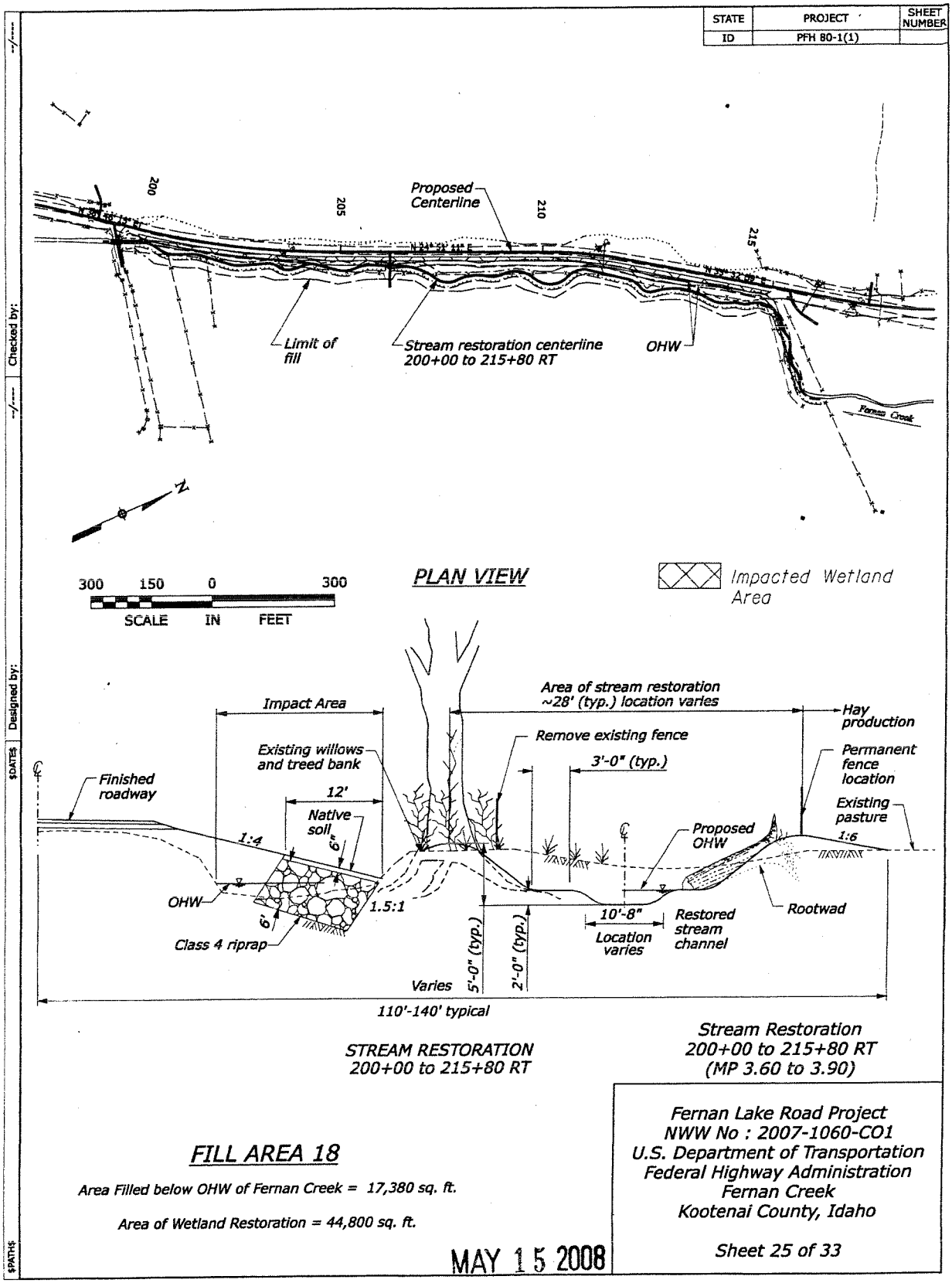
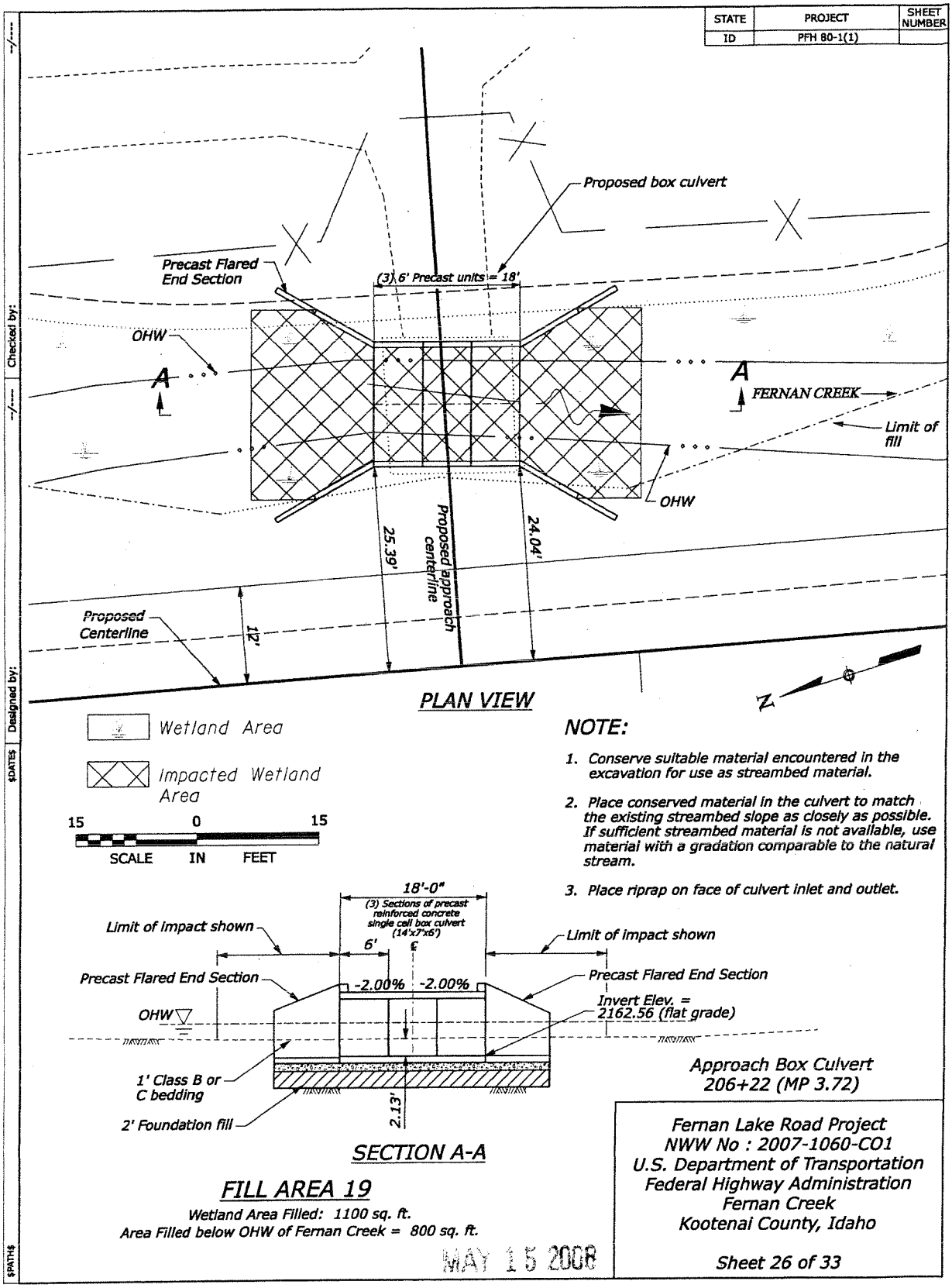


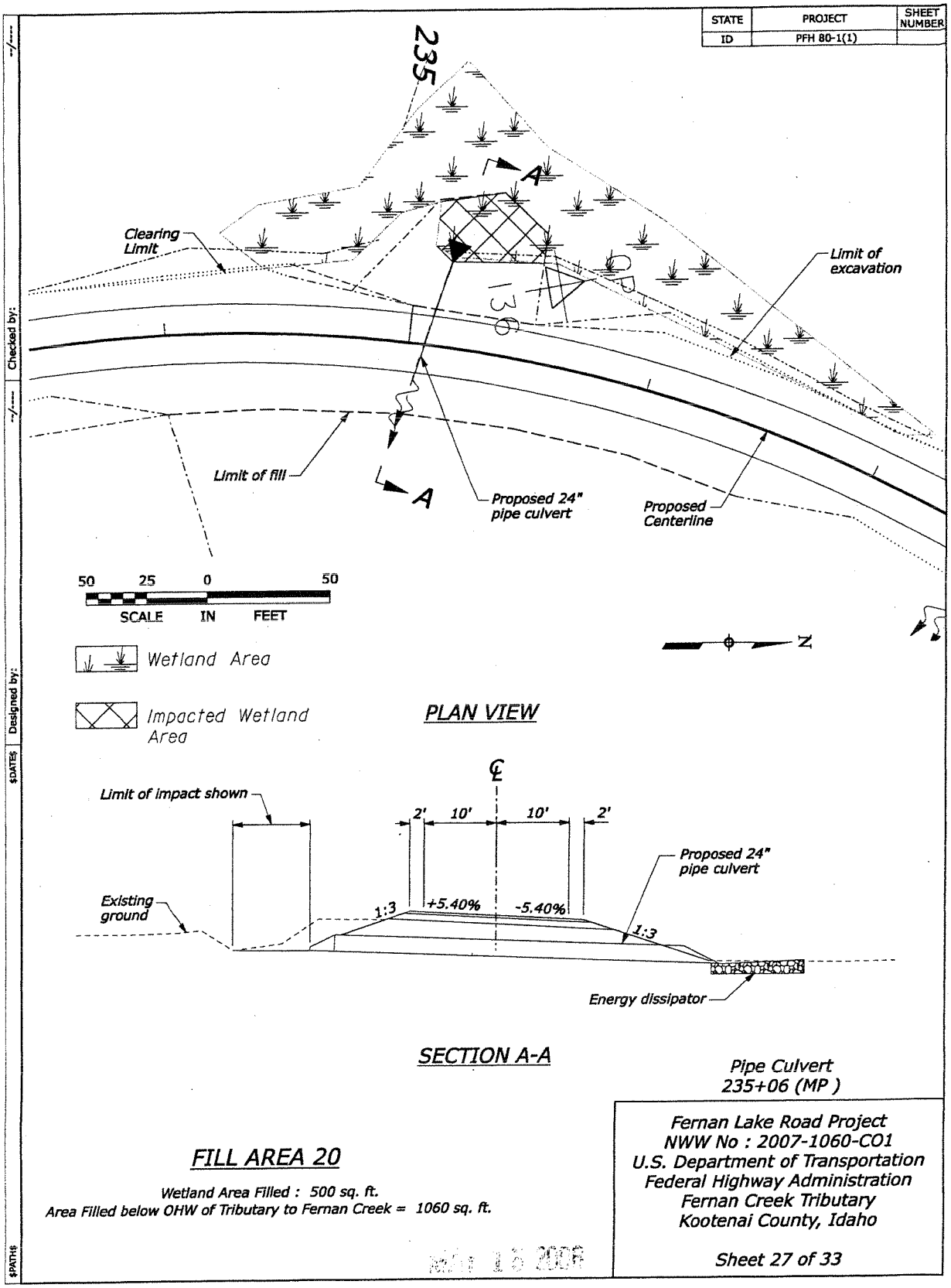
Permits
Project: ID PFH 801-(1)Fernan Lake Road



Permits
Project: ID PFH 801-(1)Fernan Lake Road



Permits
Project: ID PFH 801-(1)Fernan Lake Road



Pipe Culvert
235+06 (MP)

Fernan Lake Road Project
NWW No : 2007-1060-CO1
U.S. Department of Transportation
Federal Highway Administration
Fernan Creek Tributary
Kootenai County, Idaho

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FILL AREA 20

Wetland Area Filled : 500 sq. ft.
Area Filled below OHW of Tributary to Fernan Creek = 1060 sq. ft.

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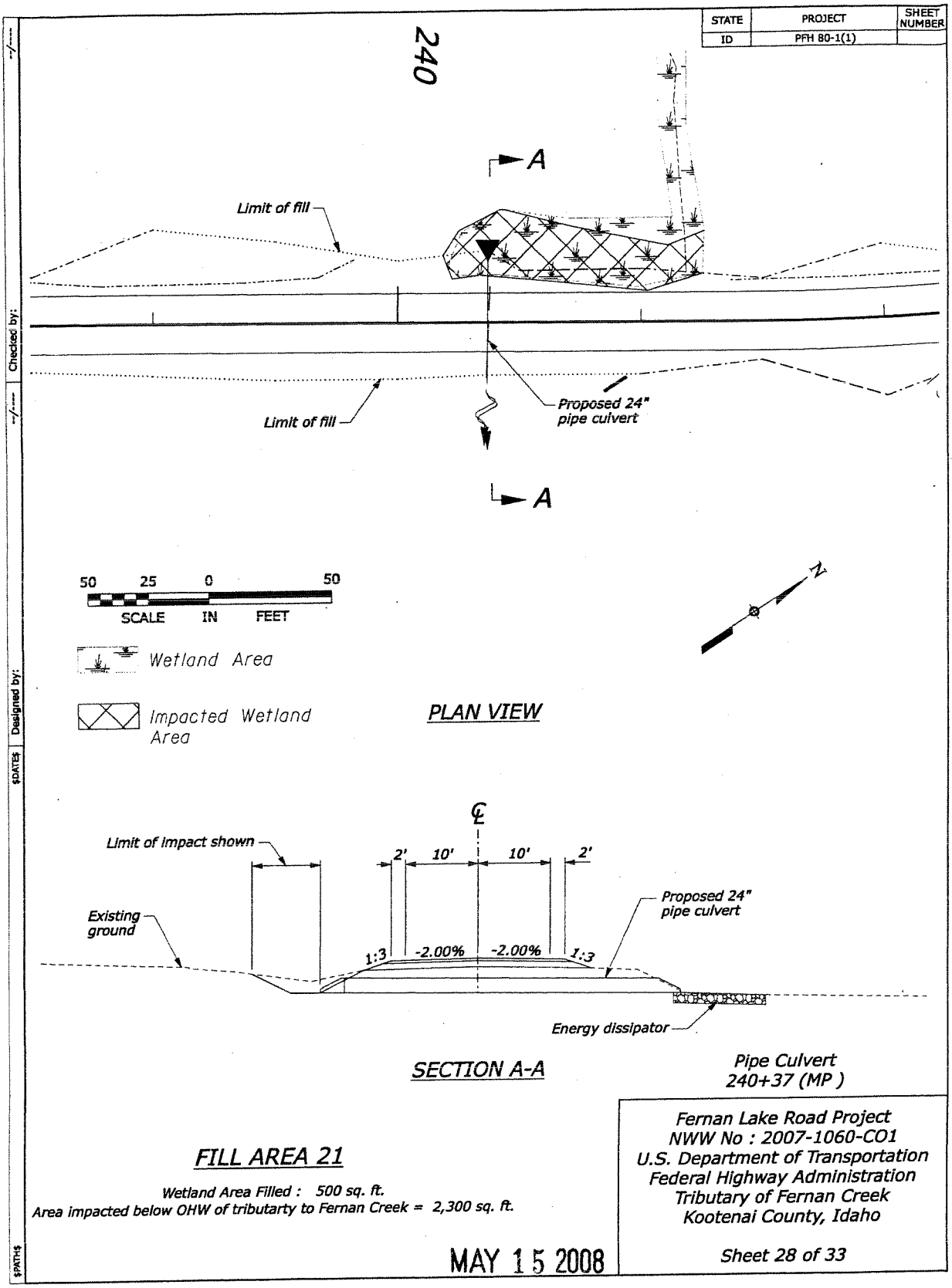
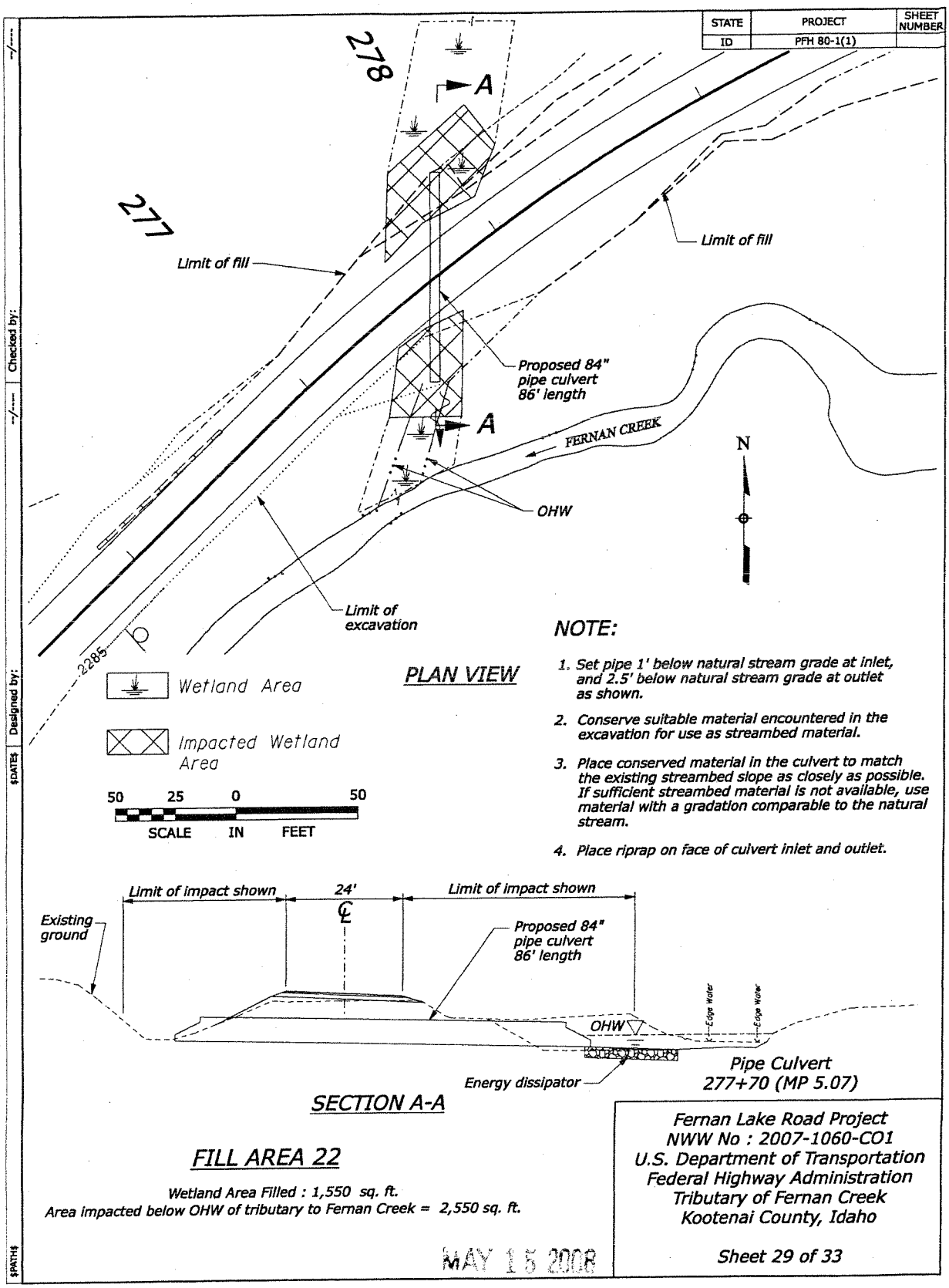
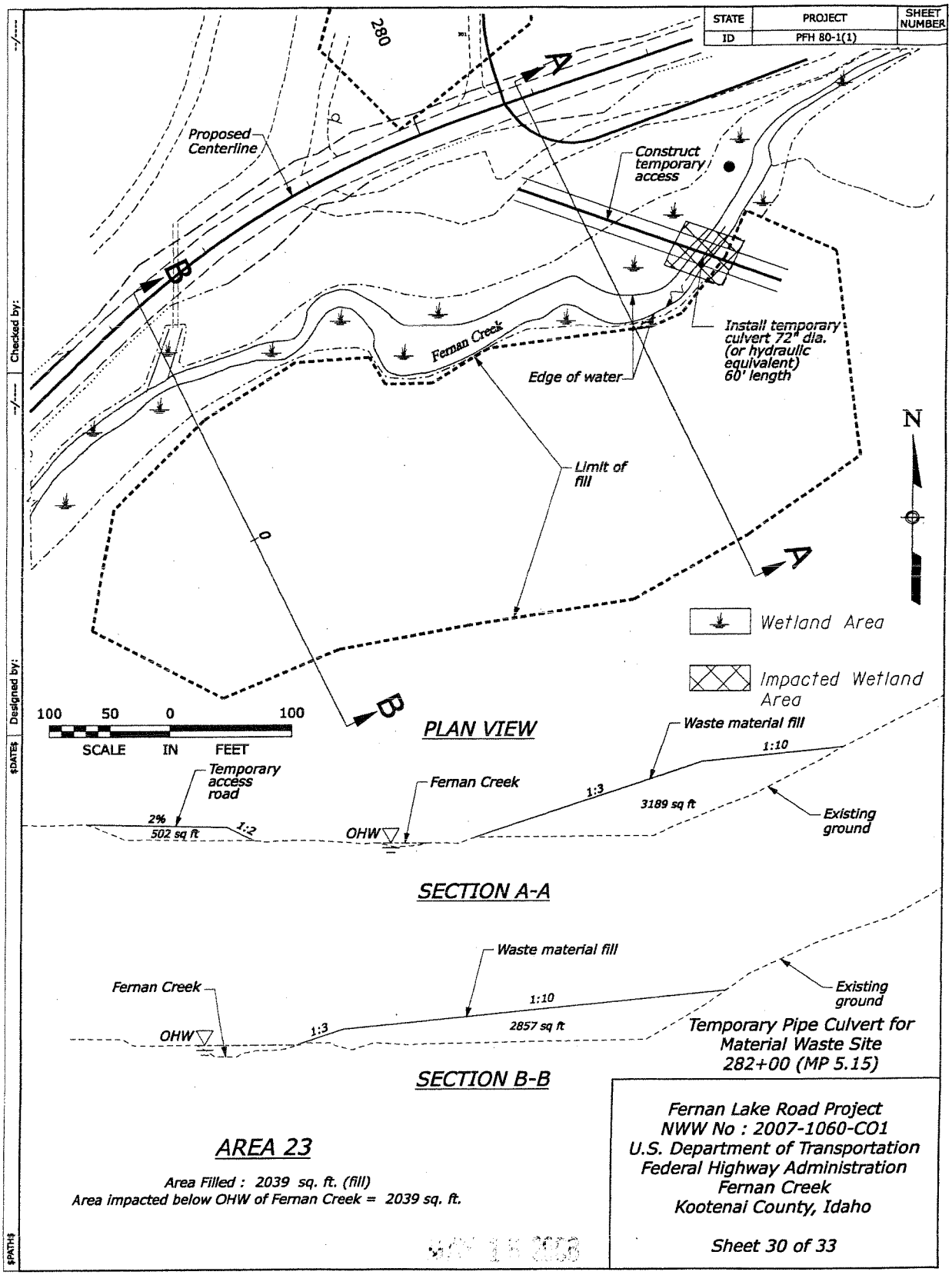


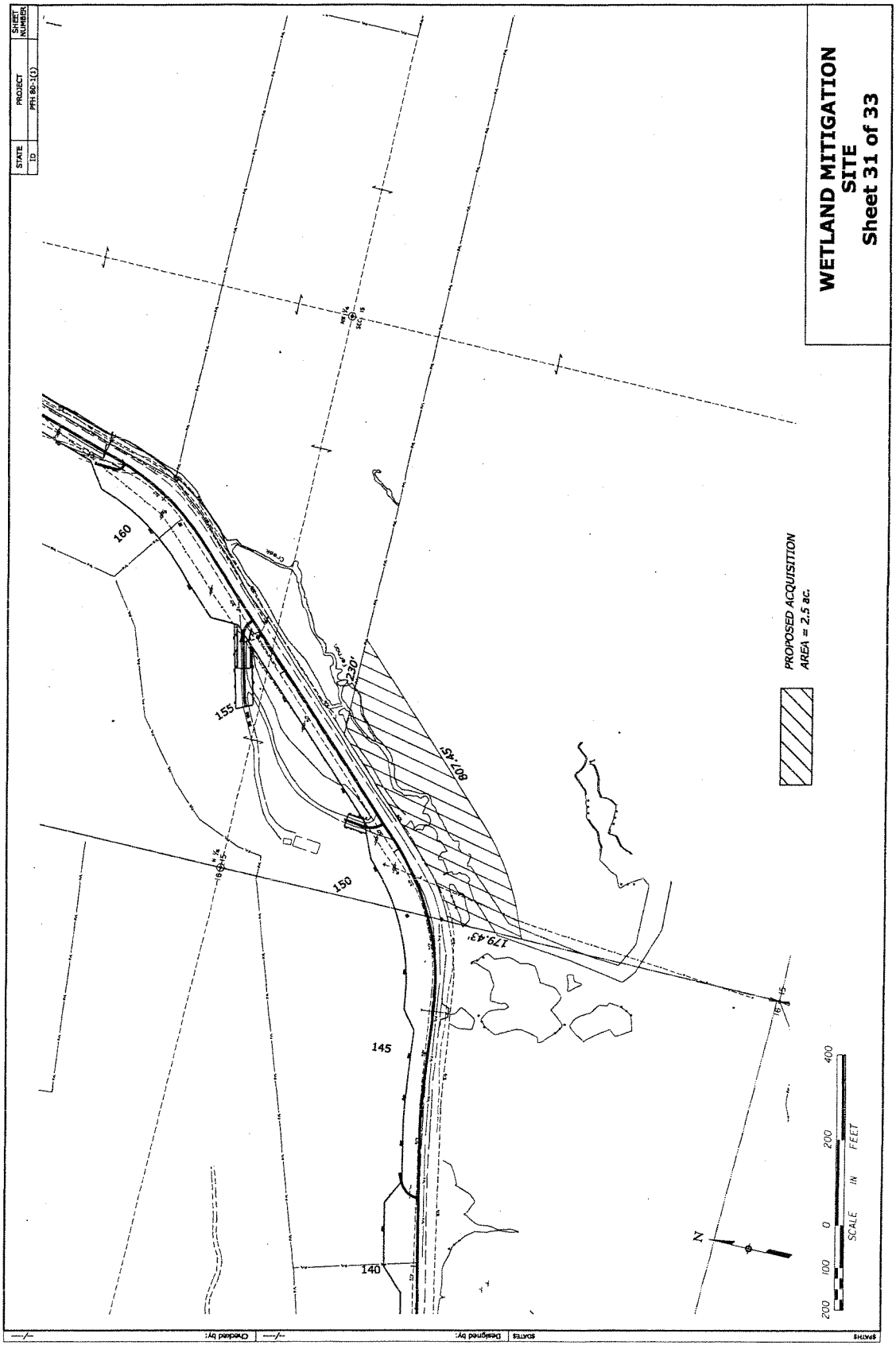
Permits
Project: ID PFH 801-(1)Fernan Lake Road



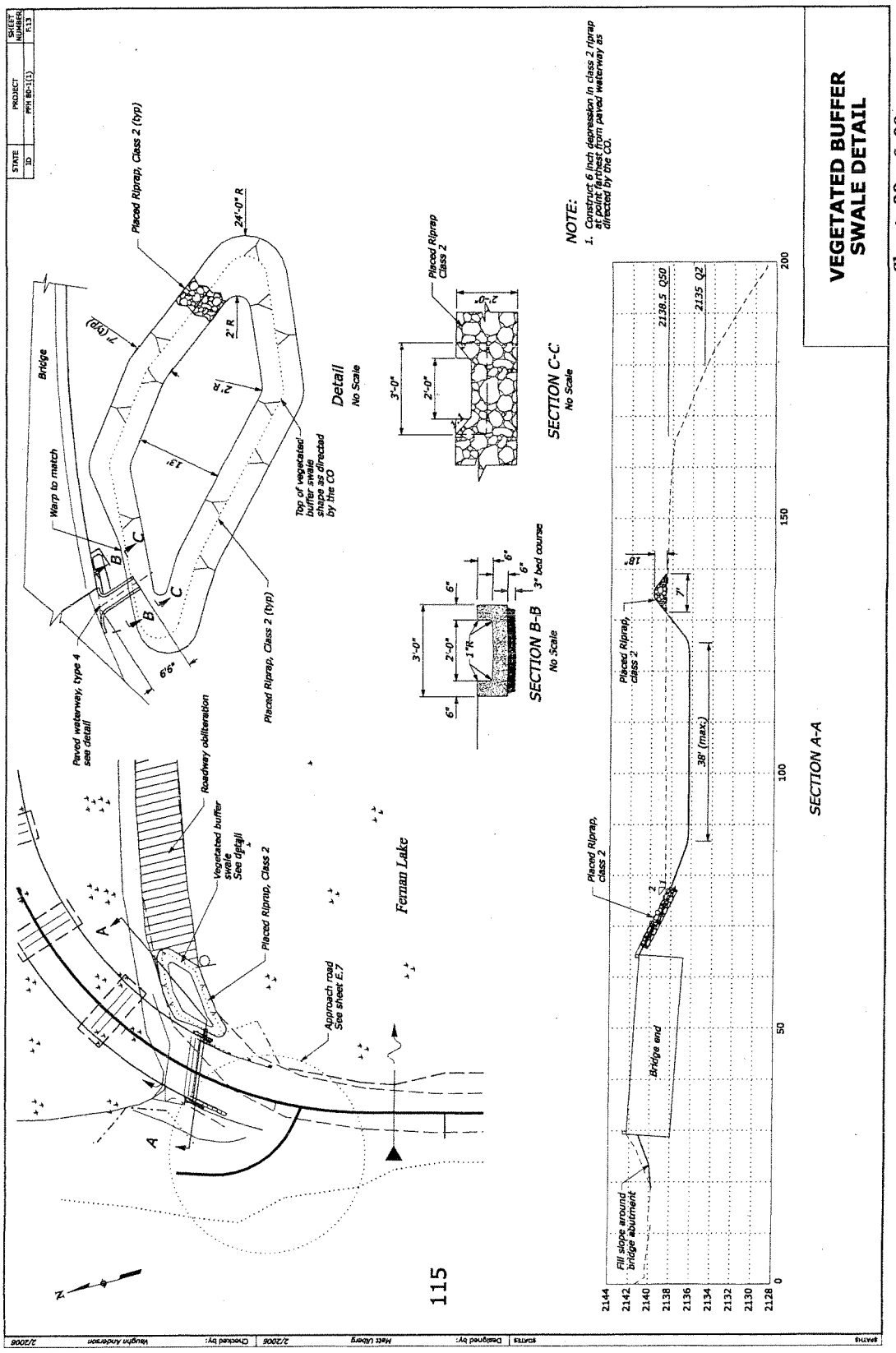
Permits
Project: ID PFH 801-(1)Fernan Lake Road



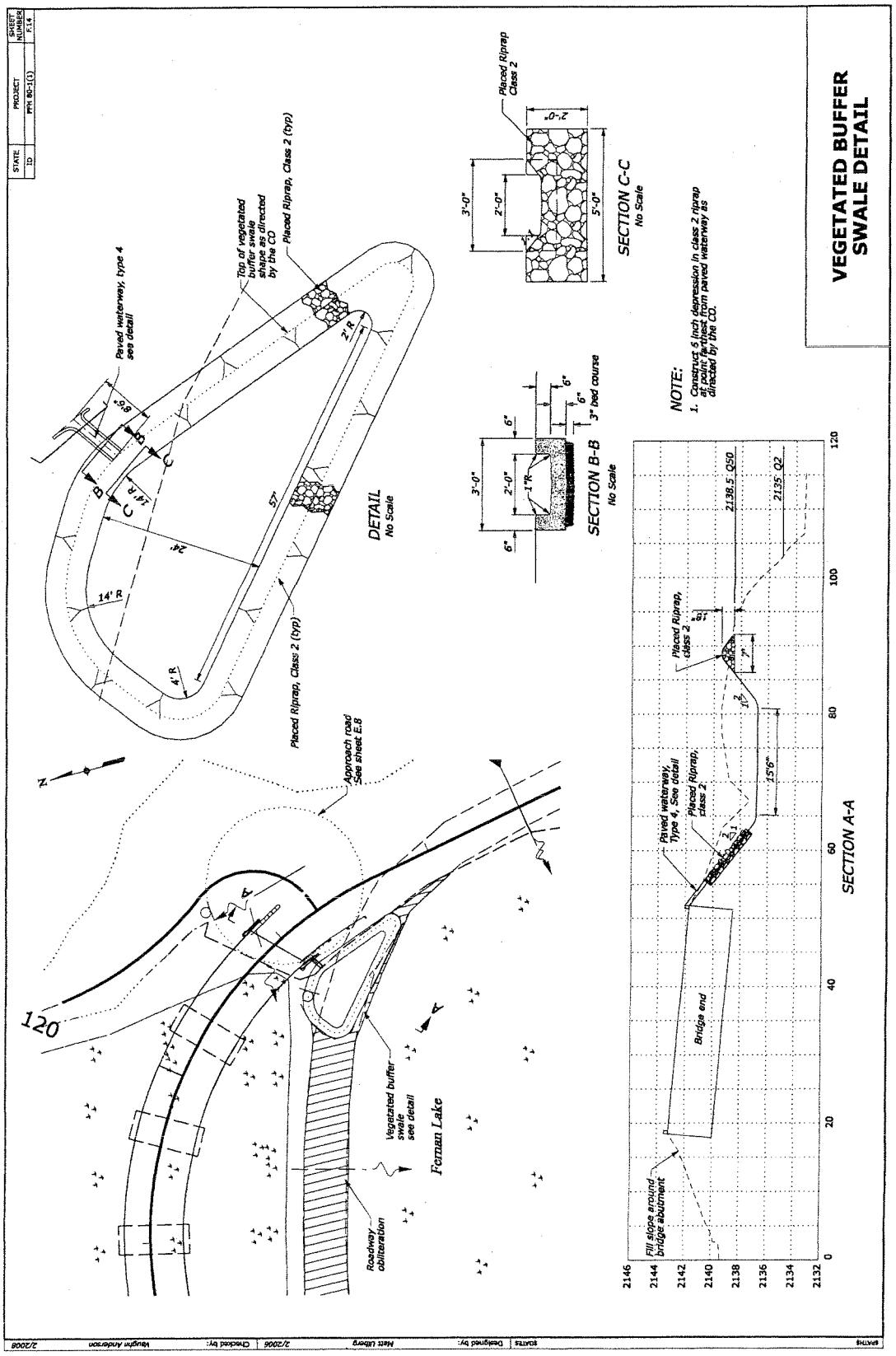
Permits
Project: ID PFH 801-(1)Fernan Lake Road



Permits
Project: ID PFH 801-(1)Fernan Lake Road



Permits
Project: ID PFH 801-(1)Fernan Lake Road



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Project: ID PFH 801-(1)Fernan Lake Road

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